




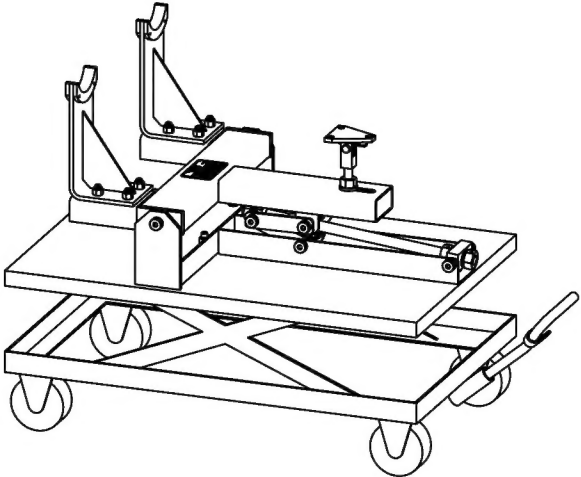



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ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
									2	-1		BASE EARS	1018/1020 CR		3
									X	-2	1	BASE WELDMENT			4
									1	-3		BASE TRAY	1018/1020 CR		5
									1	-5		BASE ARM	1018/1020 CR		6
								2		-7		END PLATE	A36/1018/1020 HR		7
								2		-9		PIVOT TABS	1018/1020 CR		8
								2		-11		CRADLE MOUNT	1018/1020 CR		9
								1		-13		CROSS TUBE	STEEL TUBE		10
								X		-14	1	CARRIAGE WELDMENT			11
								1		-15		TUBE	STEEL TUBE		12
								1	X	-17		CRADLE WELDMENT			13
								1		-17A		CRADLE ARM	A36/1018/1020 HR		14
								1		-17B		CRADLE ARM GUSSET	A36/1018/1020 HR		15
								X		-18	2	CRADLE ARM ASSEMBLY			16
								1		-19		CRADLE PAD	DELRLIN/ACETAL		17
								X		-21	1	NUT PLATE WELDMENT			18
								1		-21A		PLATE	A36/1018/1020 HR		19
								1		B/O -21B		WELDNUT	STEEL	1/2-13, HEX {MCMaster-CARR #93560A180}	18
										B/O -22	1	CLEVIS PIN	S.S.	Ø3/8 X 1, 3/4 USABLE {MCMaster-CARR #92390A269}	2
										B/O -23	1	FLANGE NUT	S.S.	1/2-13, Ø1-1/8 FLANGE {MCMaster-CARR #94758A033}	2
										B/O -24	1	HAIR PIN	S.S.	Ø5/64 WIRE X Ø1/4 EYE X 1-1/2 {MCMaster-CARR #92391A044}	2
								X		-25	1	STUD WELDMENT			20
								1		B/O -25A		ALL THREAD	STEEL	1/2-13 X 3, GRADE B7 {MCMaster-CARR #98750A103}	20
								1		-25B		TAPPED CLEVIS YOKE	STEEL	Ø3/8 HOLE, 1/2-20 {APPLIED #L071300500} MODIFIED	21
								X		-27	1	FRONT ENGINE MOUNT WELDMENT			22
								1		-27A		MOUNT PLATE	A36/1018/1020 HR		23
								1		-27B		TAB	A36/1018/1020 HR		24
								X		-28	1	REAR PIVOT BLOCK WELDMENT			25
								1		B/O -29		ACME NUT	STEEL	5/8-8 ACME {MCMaster-CARR #94815A108}	25
								1		-29A		REAR PIVOT BLOCK	A36/1018/1020 HR		26
										-29B	1	FRONT PIVOT BLOCK	A36/1018/1020 HR		27
										-31	4	LINK	A36/1018/1020 HR		28
										-33	1	ACME THREADED ROD ROD	S.S.	5/8-8 {MCMaster-CARR #95061A825} MODIFIED	29
										-35	1	ACME NUT DRILLED FOR ROLL PIN	S.S.	5/8-8 ACME {MCMaster-CARR #95066A213} MODIFIED	30
										-36	2	ACME NUT DRILLED FOR SET SCREW	S.S.	5/8-8 ACME {MCMaster-CARR #95066A213} MODIFIED	31
										B/O -37	2	THRUST BEARING	STEEL	Ø5/8 BORE {APPLIED #TORRINGTON NTA 1018}	2
										B/O -39	4	THRUST BEARING RACE	STEEL	Ø5/8 BORE {APPLIED #TORRINGTON TRA 1018}	2
										B/O -40	1	ROLL PIN	S.S.	Ø5/32 X 7/8 {MCMaster-CARR #92373A216}	2
										B/O -41	2	SOCKET HEAD SET SCREWS	S.S.	10-24 X 1/4 {MCMaster-CARR #92311A238}	2
										B/O -43	6	SOCKET HEAD SHOULDER BOLTS	S.S.	Ø1/2 X 3/8, 3/8-16 {MCMaster-CARR #90298A705}	2
										B/O -44	4	SOCKET HEAD SHOULDER BOLTS	S.S.	Ø1/2 X 1/2, 3/8-16 {MCMaster-CARR #90298A707}	2
										B/O -45	21	NYLOCK NUTS	S.S.	3/8-16 {MCMaster-CARR #91831A127}	2
										B/O -46	24	MACHINE BUSHING WASHERS	S.S.	Ø3/4 O.D. X Ø1/2 I.D. X .030 {MCMaster-CARR #97022A497}	2
										B/O -47	17	HEX HEAD CAP SCREWS	S.S.	3/8-16 X 1 {MCMaster-CARR #92240A624}	2
										B/O -49	8	FLAT WASHERS	S.S.	Ø.406 I.D. X Ø.750 O.D. {MCMaster-CARR #98370A019}	2
										-51	1	HYDRAULIC LIFT CART ASSEMBLY		17-3/4 X 27-1/2 {GRAINGER, DAYTON #3KR46J} MODIFIED	32
								X		-53	1	PUMP HANDLE WELDMENT			33
								1		-55		CABLE STOP	1018/1020 CR		34
								1		-57		RELEASE HANDLE PIVOT	1018/1020 CR		35
									2	B/O -59		ROLL PIN	S.S.	Ø1/8 X 3/4 {MCMaster-CARR #92373A181}	16
										B/O	1	PLACARD	ALUMINUM	RB41011 OR RB41009 SEE NOTE  SHEET 2	2
ASSY -53	ASSY -28	ASSY -27	ASSY -25	ASSY -21	ASSY -18	ASSY -17	ASSY -14	ASSY -2							

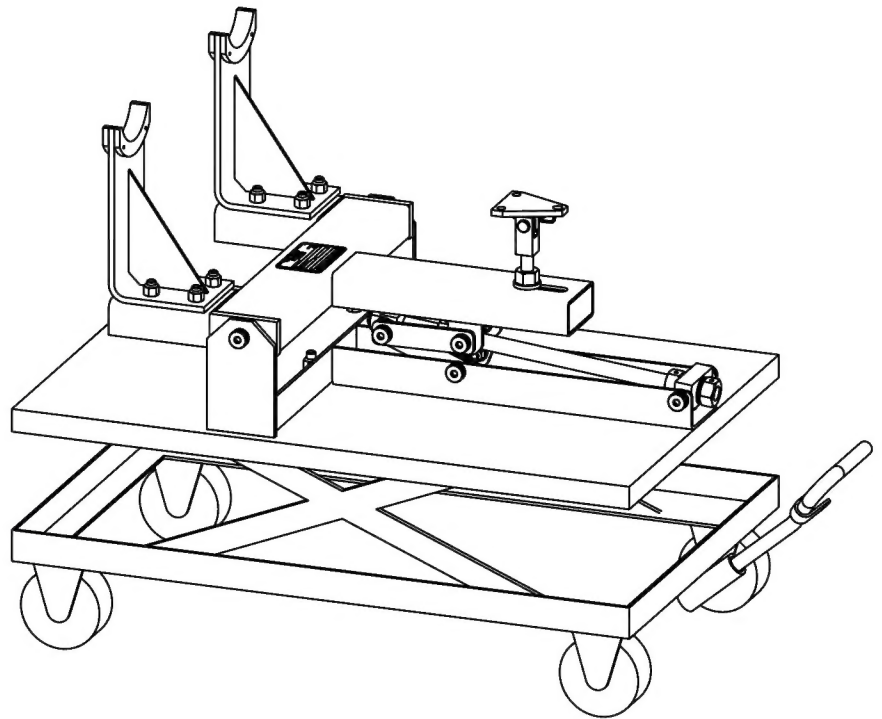
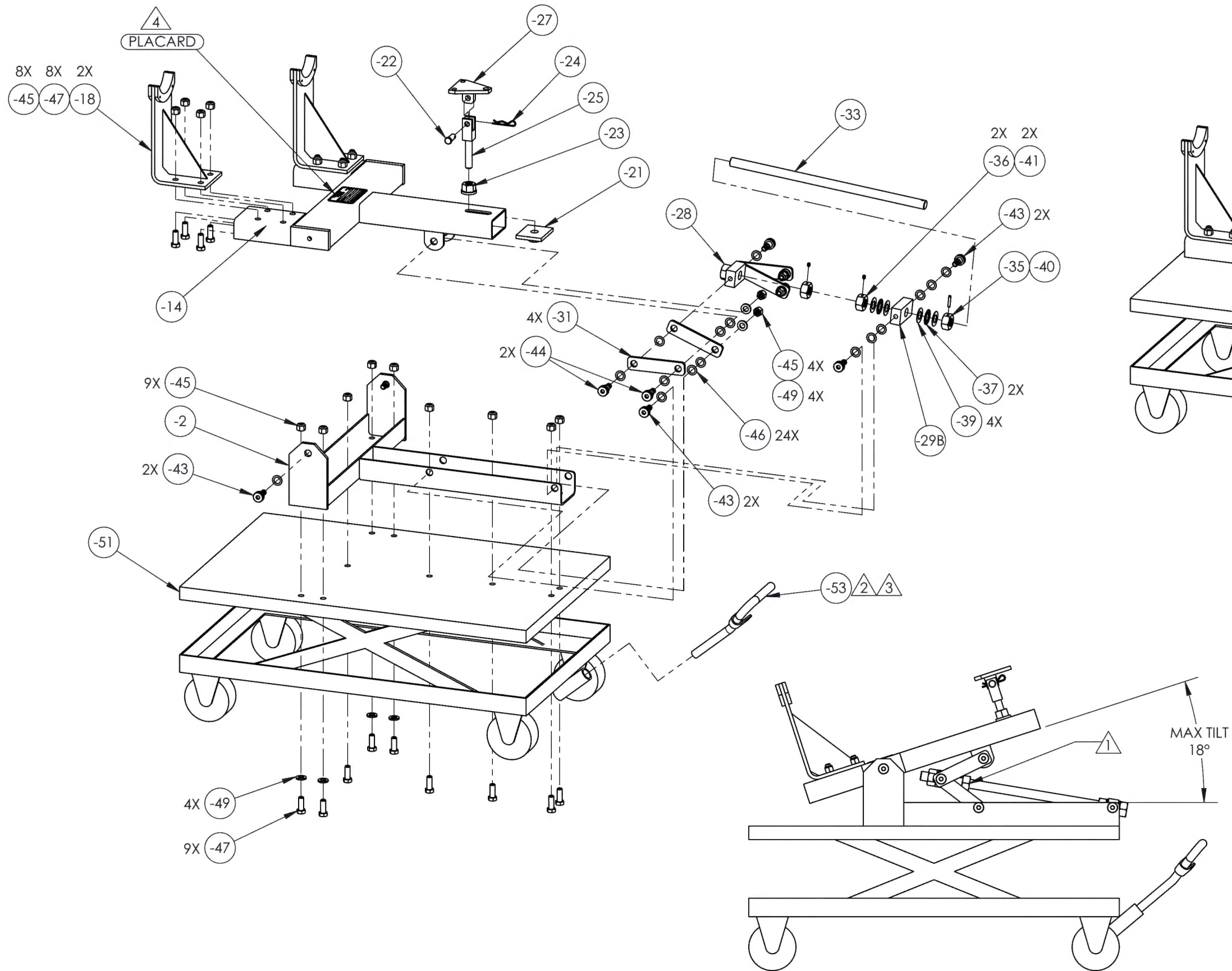
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-19 MATERIAL CHANGED TO UHMW DUE TO CRACKING PROBLEMS.	10/15/2001		
2		-19 RADIUS INCREASED TO Ø3.220 FOR BETTER FIT ON ENGINE. ALSO -15 SLOT LENGTHENED TO ALLOW FOR GREATER ADJUSTMENT.	2/22/2002		
3		-17 RADIUS INCREASED TO R1.720, & EARS SHORTENED.			
4		CHANGED -27B TAB TO MATE WITH OFF THE SHELF CLEVIS.	6/3/2002		
5		-3 FOUR HOLES CHANGED TO SLOTS TO BETTER FIT LIFT TABLE	5/7/2003		
6		CHANGED -3 FOUR SLOTS TO HOLES AND APPROPRIATELY PLACED THEM. ADDED C-BORES TO -29 PIVOT BLOCK. ADDED -53 & -55 & -57 DWG'S TO FILE FROM HAND PRINTS.	11/21/2006	WP	
7		CONSOLIDATED 17 FILES INTO 1 FILE. ORGANIZED ALL DWG'S, SUPPLIED MISSING DATA & DRAWINGS, IMPLEMENTED NEW TITLE BLOCK, BOM, & REVISIONS TABLE.	2/27/2008	WP	
8		ADDED PG. 16 OF 16. CH'D -19 DIM .125 TO 1.19.. ADDED RB PLACARD -60 TO BOM.	5/12/2009	WP	
8A		ADDED NOTES 1 & 2. CH'D ALL BOM HARDWARE FROM STEEL TO S.S. & ADDED P/N'S PER R.W.	8/31/2011	RJC	
9		CH'D TITLEBLOCK TOLERANCES FROM .005, .01, .1. ADDED -14 MISSING 10.50 DIM BETWEEN HOLES ON -11 MOUNTS & CH'D SOME TOLERANCES. ADDED -17A P.F. -59 TO Ø.125 PER G.E.	12/1/2011	RJC	
10		CH'D -14 DIM FROM 7.3 TO 7.3±.015 AND ADDED NOTE PER S.E.	5/7/2012	RJC	SE
11		-27A ADDED NESTING POCKET TO PART. -27B CH'D DIM WAS 1.00 IS 1.015 PER G.E.	3/29/2013	BIM	GE
12	15-0347	UPDATED TO NEW DRAFTING STANDARDS. ADDED ADJUSTMENT NOTE SHEET 2. -1 CH'D DIM WAS Ø.500 IS Ø.520 +.010 -.000. -2 CH'D DIMS WAS 16.63 IS (16.630), WAS 5.563 IS (5.563). DELETED DIM 19.00. -3 CH'D DIMS WAS 5X Ø.375 IS 5X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 14.88 IS 2X 14.88, WAS 7.44 IS 2X 7.44, WAS .88 IS 2X .88, WAS 1.75 IS 2X 1.75, WAS 10ga IS .13(10ga), WAS 1.75 IS 2X 1.75. -5 CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS 4X Ø.500 IS 4X Ø.520 +.010 -.000, WAS R MIN IS 2X R.25 MAX, WAS 4X 1.375 IS 2X 1.375, WAS 2X 15.50 IS 15.50, WAS 2X 5.56 IS 5.56. -7 CH'D DIM WAS .375 IS .38. -9 CH'D DIMS WAS Ø.500 IS Ø.520 +.010 -.000, WAS .188 IS .19. -11 CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 10ga IS .13(10ga). -13 CH'D DIM WAS (.120) IS .12. --14 CH'D DIMS WAS 8.0 IS (8.000), WAS 16.0 IS (16.000), WAS 18.0 IS (18.000), WAS 4.500 IS (4.500), WAS .813 IS (.813), WAS 4X .875 IS (4X .875). DELETED DIM 5.1. -15 CH'D DIMS WAS Ø.500 IS Ø.547, WAS 8.875 IS 8.125, WAS 2.00 IS 1.50, WAS (.120) IS .12.. -17 ADDED DIM (5.000). -17A MOVED Ø.125 HOLES TO -18 ASSY. CH'D DIM WAS 4X Ø.375 IS 4X Ø.406. -17B CH'D DIM WAS 10ga IS .13(10ga). -18 ADDED DIM 2X Ø.125-.129. ADDED TEMPLATE NOTE. -19 CH'D DIMS WAS 2X 1.53 IS (2X 1.530), WAS 2X 1.29 IS (1.290), WAS 2X Ø.125 IS 2X Ø.125-129. ADDED DIMS 2X .94, (2X .593), 2.58, .47. -21 ADDED CENTER NOTE. -21B ADDED B/O REF #93560A180. -25A ADDED B/O REF #98750A103. -27 CH'D DIM WAS .250 IS .25. -27A DELETED DIMS 4X .063, 1.130. CH'D DIM WAS 22° IS (22°). ADDED 4X CORNER RELIEF NOTE. -27B CH'D DIMS WAS Ø.377 IS Ø.3780-.3815, WAS .60 IS .615, WAS 1.015 IS 1.02. -28 ADDED CENTER NOTE. -29 ADDED B/O REF #94815A108. -29B CH'D DIMS WAS 2.75 IS 2.50, WAS 2X 3/8-16 UNC L 1 Ø.500 W .125 IS 3/8-16 UNC-2B. -31 CH'D DIMS WAS Ø.500 IS 2X Ø.504-.508, WAS R.25 IS 4X R.25, WAS .188 IS .19. -33 CH'D DIM WAS Ø.156 IS Ø.156-.160, ADDED DIM (5/8-8 ACME-2G). -35 DELETED FINISH. CH'D DIMS WAS Ø.156 IS Ø.156-.160, WAS (.275) IS .28. -36 DELETED FINISH. CH'D DIMS WAS (.275) IS .28, WAS 10-24 UNC ONE SIDE IS 10-24 UNC-2B W .38. -39 CH'D QTY WAS 2 IS 4. -43 CH'D QTY WAS 8 IS 6. -44 CH'D QTY WAS 2 IS 4. -46 CH'D QTY WAS 20 IS 24. -51 ADDED DIMS (2X 7.440), (2X 7.440), (2X 18.375), (17.500), (2X 16.625), (11.000), (6.000), (2X 1.000). ADDED POSITION NOTE. -55 ADDED DIMS R.13, .83, .90, (.73), (.73). -57 DELETED DIMS 1-1/8, 1-1/4. ADDED DIMS 1.56, 1.29. CH'D DIMS WAS R3/8 IS R.38, WAS R5/16 IS R.31. CH'D TOLERANCES ON NON-CRITICAL DIMENSIONS. ADDED ADJUSTMENT NOTE.	11/6/2015	DPD	JAG
13	16-0203	-17A CH'D MATERIAL WAS A709 GRADE 36 IS A36/1018/1020 HR. -17B CH'D MATERIAL WAS 1018/1020 CR IS A36/1018/1020 HR. -18 CORRECTED P/N WAS -17A IS -17. -19 CH'D MATERIAL WAS BLACK UHMW IS DELRIN/ACETAL. CH'D PART NUMBER WAS RB41011 IS PLACARD  . ADDED NOTE  .	11/2/2016	RJC	JAG
14	17-0043	-17 ADDED DIM'S R1.72, 1.290, 2.580, 1.13, 2X .940, 2X Ø.129/.125 THRU ALL (P.F. -.59). -17A DELETED DIM'S 1.13, 6.50 R1.72, ADDED DIM 7.63. -18 DELETED FRONT VIEW WITH 2X Ø.129/.125 THRU ALL  . DELETED NOTE  .	2/13/2017	RJC	JAG



	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301	REV 14
MAT'L HEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ± 1/8 ANGLES ±1° SURFACES = 125/✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	SHWEIZER 330
SCALE 1:10	DATE 5/22/2001
SHEET 1 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
13	16-0203	CH'D PART NUMBER WAS RB41011 IS PLACARD Δ . ADDED NOTE Δ .	11/2/2016	RJC	JAG

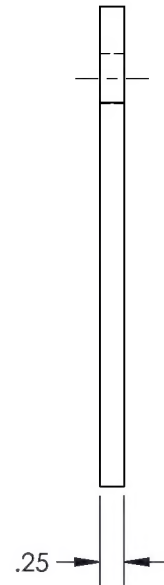
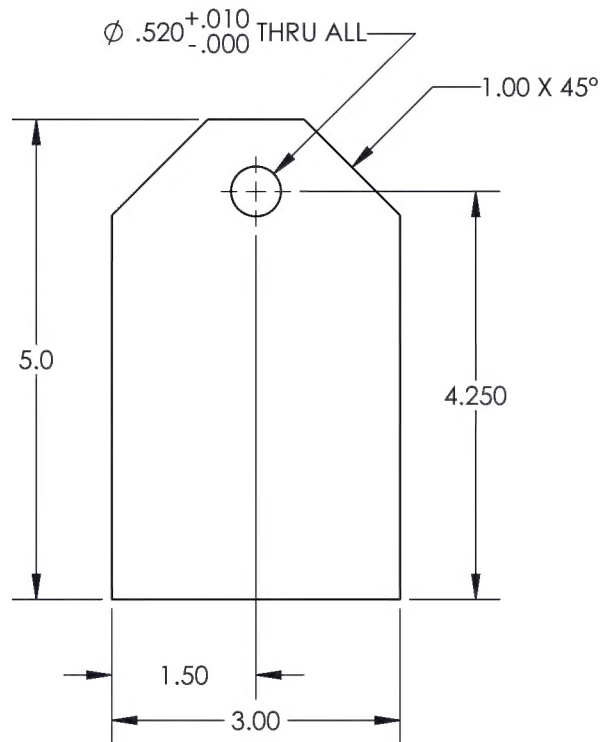


- NOTES:
- 1 ADJUST -36 ACME NUT TAPPED FOR SET SCREW TO SET MAXIMUM TILT. SECURE WITH -41 SOCKET HEAD SET SCREWS.
 - 2 ASSEMBLE MODIFIED PUMP HANDLE AND ATTACH TO CART. TRIM CABLE TO FIT. PRESSURE RELEASE MUST WORK SMOOTHLY.
 - 3 MOUNT ORIGINAL LIFT CART PRESSURE RELEASE HANDLE IN -53 PUMP HANDLE WELDMENT.
 - 4 RB41009 RED BARN PLACARD FOR NAVY ONLY. RB41011 DART PALCARD FOR ALL OTHERS.

DART AEROSPACE			
TITLE ENGINE LIFT ASSEMBLY			
DWG NO. 269T3301		REV 14	
MAT'L HEAT TREAT FINISH SPEC		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125/	
DRAWN BY: COLE		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
CHECKED: DUERFELDT		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
OPPS APPR: ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
QA APPR: LINDSAY		USED ON MODEL	
APPROVED: GILBERT		SHWEIZER 330	
SCALE 1:8	DATE 5/22/2001	SHEET 2 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-1 CH'D DIM WAS Ø.500 IS Ø.520 +.010 -.000.	11/6/2015	DPD	JAG

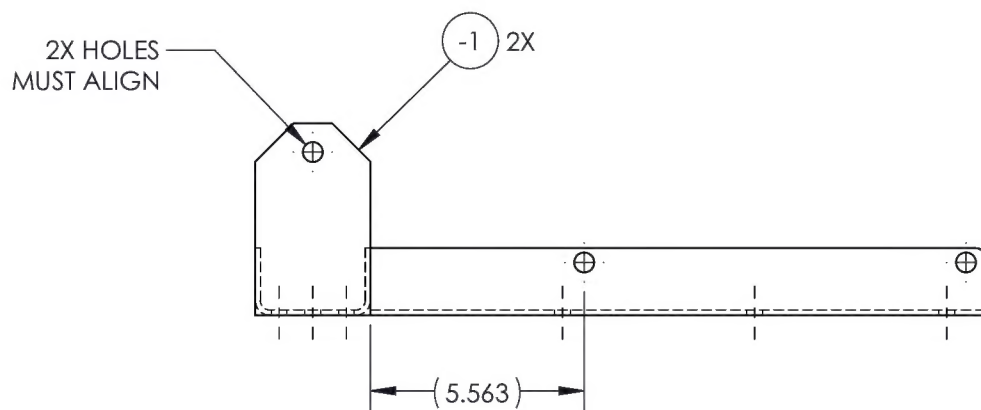
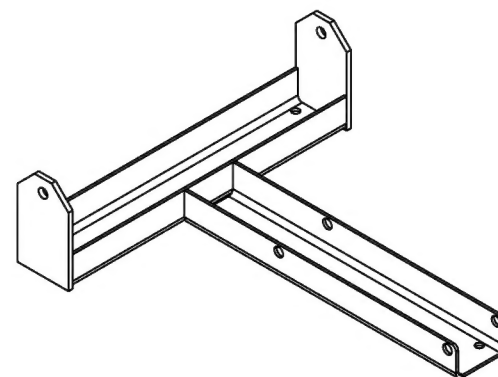
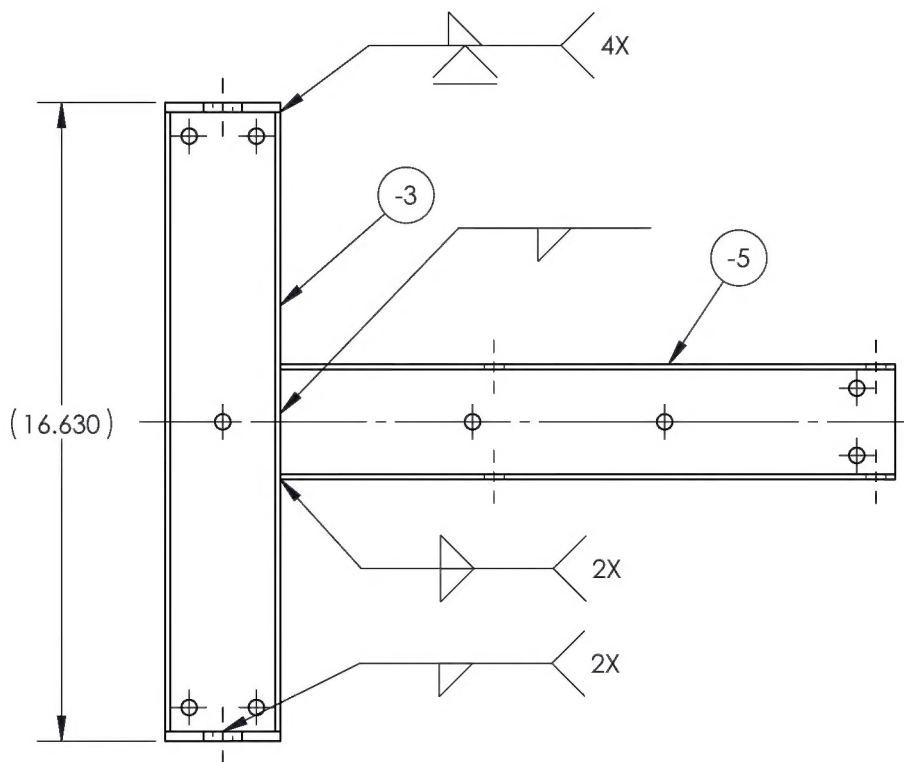


(-1)
BASE EARS

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-1	REV 14
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -2 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125/
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:2	DATE 5/22/2001
	SHEET 3 OF 37

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-2 CH'D DIMS WAS 16.63 IS (16.630), WAS 5.563 IS (5.563). DELETED DIM 19.00.	11/6/2015	DPD	JAG

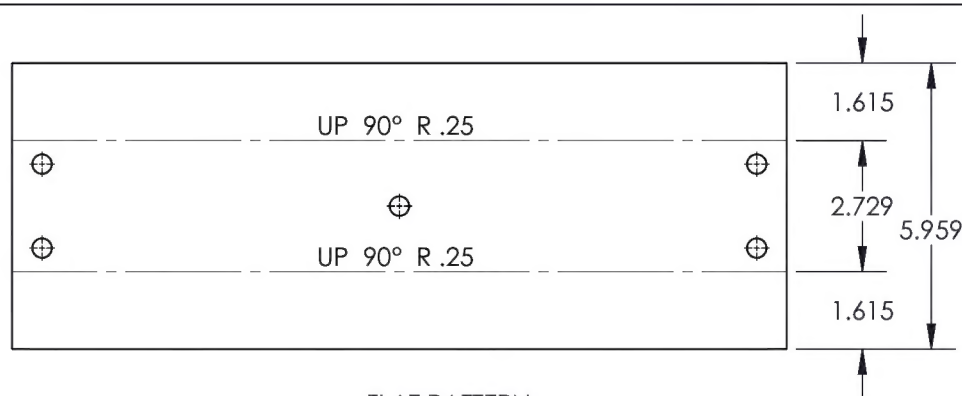
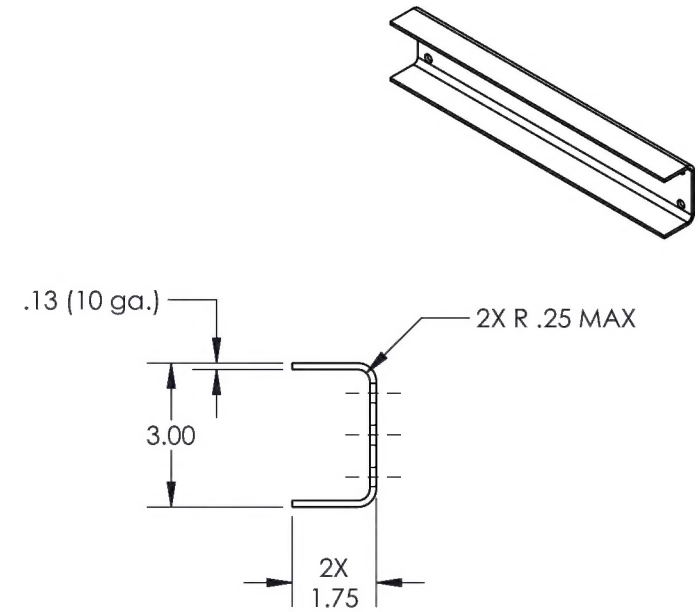
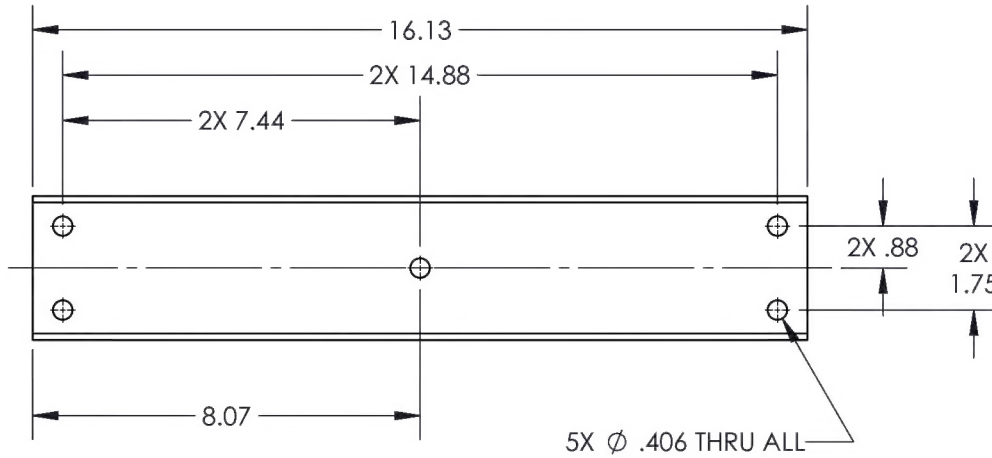


(2)
BASE WELDMENT

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-2	REV 14
MAT'L HEAT TREAT FINISH POWDER COAT WHITE SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: COLE	USED ON MODEL
CHECKED: DUERFELDT	SHWEIZER 330
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:5	DATE 5/22/2001
SHEET 4 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
5		-3 FOUR HOLES CHANGED TO SLOTS TO BETTER FIT LIFT TABLE.	5/7/2003		
6		CHANGED -3 FOUR SLOTS TO HOLES AND APPROPRIATELY PLACED THEM.	11/21/2006	WP	
12	15-0347	-3 CH'D DIMS WAS 5X Ø.375 IS 5X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 14.88 IS 2X 14.88, WAS 7.44 IS 2X 7.44, WAS .88 IS 2X .88, WAS 1.75 IS 2X 1.75, WAS 10ga IS .13(10ga), WAS 1.75 IS 2X 1.75.	11/6/2015	DPD	JAG



FLAT PATTERN
DIMENSIONS FOR REFERENCE ONLY

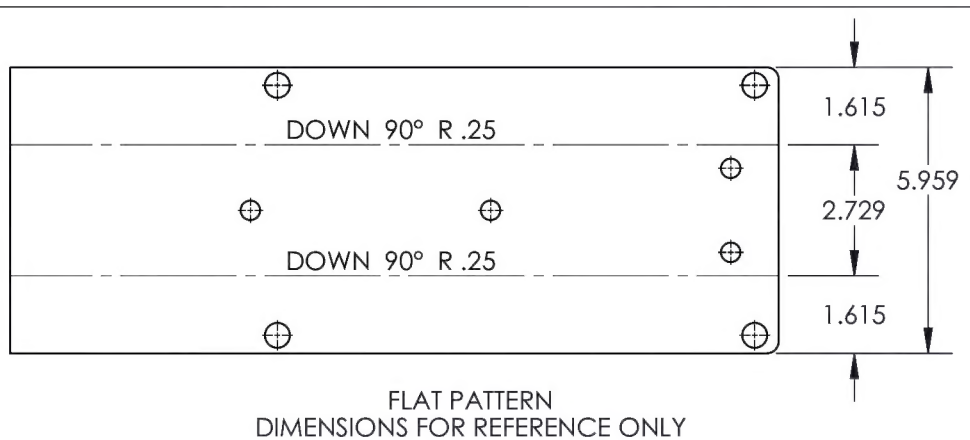
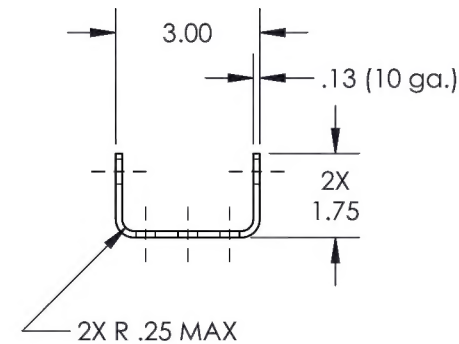
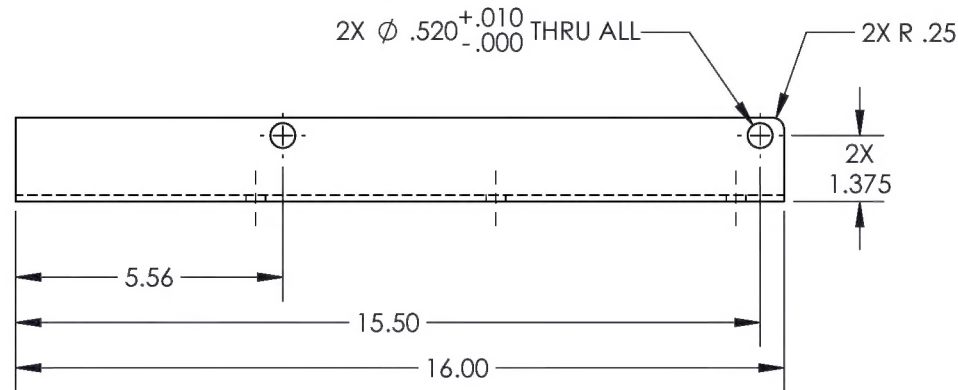
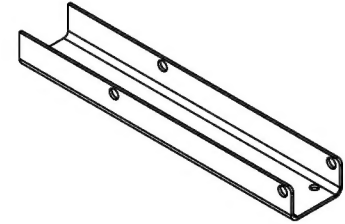
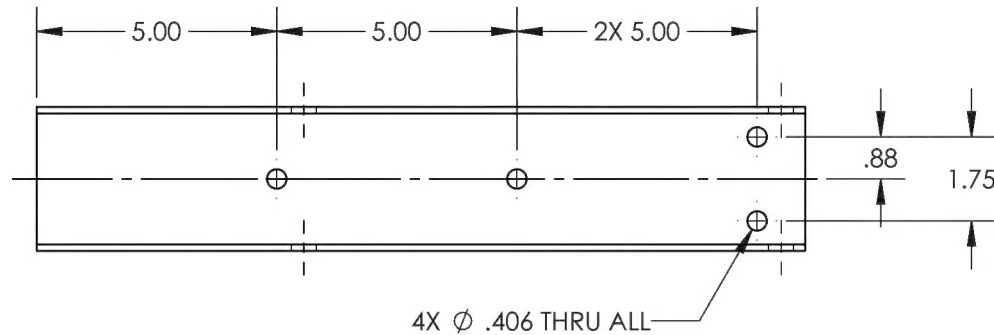
③

BASE TRAY

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-3	REV 14
MAT'L 1018/1020 CR HEAT TREAT FINISH SEE -2 WELDMENT SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL SHWEIZER 330	
SCALE 1:4	DATE 5/22/2001
SHEET 5 OF 37	

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REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED	
12	15-0347	-5 CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS 4X Ø.500 IS 4X Ø.520 +.010 -.000, WAS R MIN IS 2X R.25 MAX, WAS 4X 1.375 IS 2X 1.375, WAS 2X 15.50 IS 15.50, WAS 2X 5.56 IS 5.56.	11/6/2015	DPD	JAG	

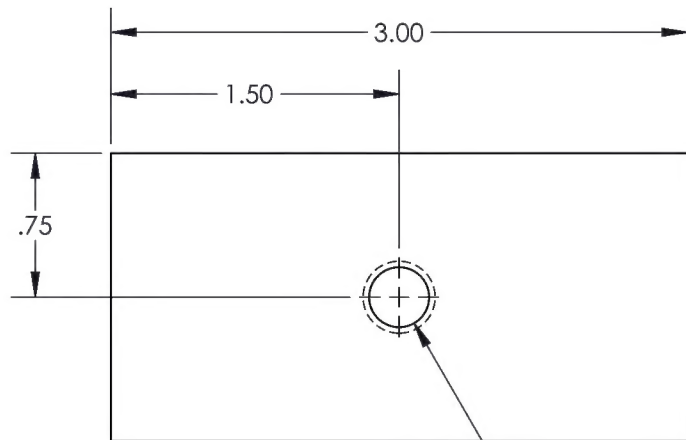
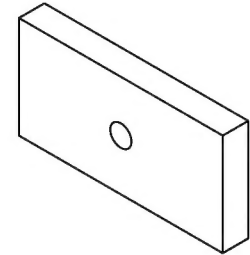


(-5)
BASE ARM

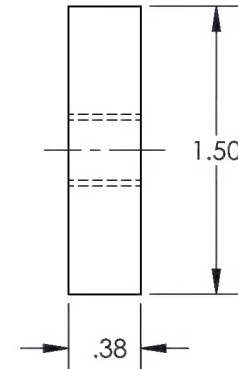
DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-5	REV 14
MAT'L 1018/1020 CR HEAT TREAT FINISH SEE -2 WELDMENT SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL SHWEIZER 330	
SCALE 1:4	DATE 5/22/2001
SHEET 6 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-7 CH'D DIM WAS .375 IS .38.	11/6/2015	DPD	JAG



3/8-16 UNC - 2B THRU ALL

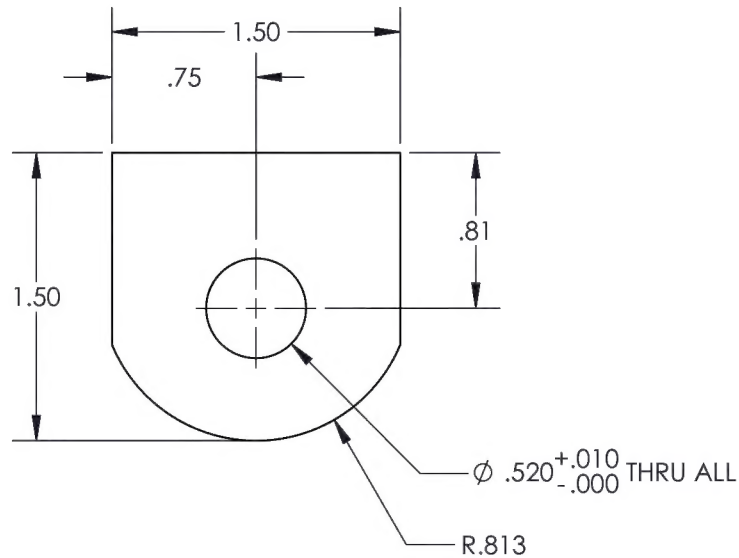
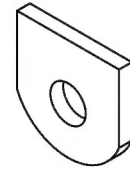


(-7)
END PLATE

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-7	REV 14
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -14 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	SHWEIZER 330
SCALE 1:1	DATE 5/22/2001
	SHEET 7 OF 37

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-9 CH'D DIMS WAS Ø.500 IS Ø.520 +.010 -.000, WAS .188 IS .19.	11/6/2015	DPD	JAG



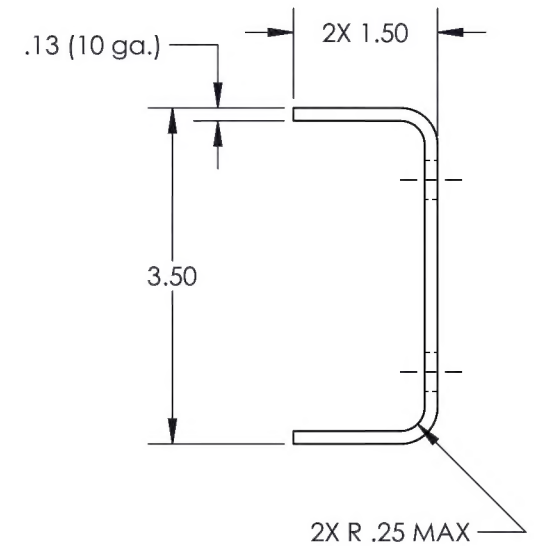
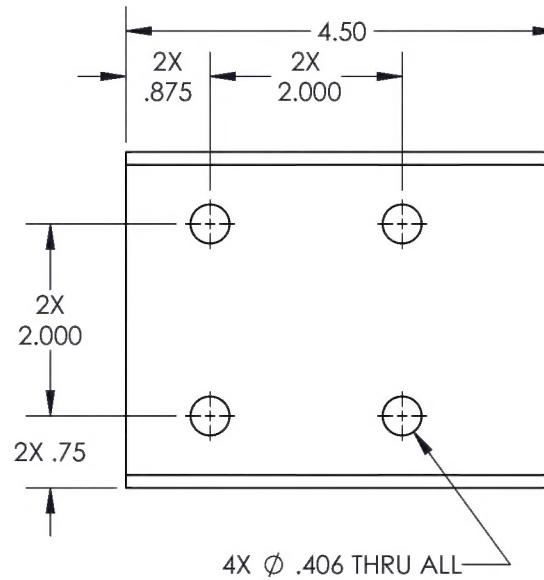
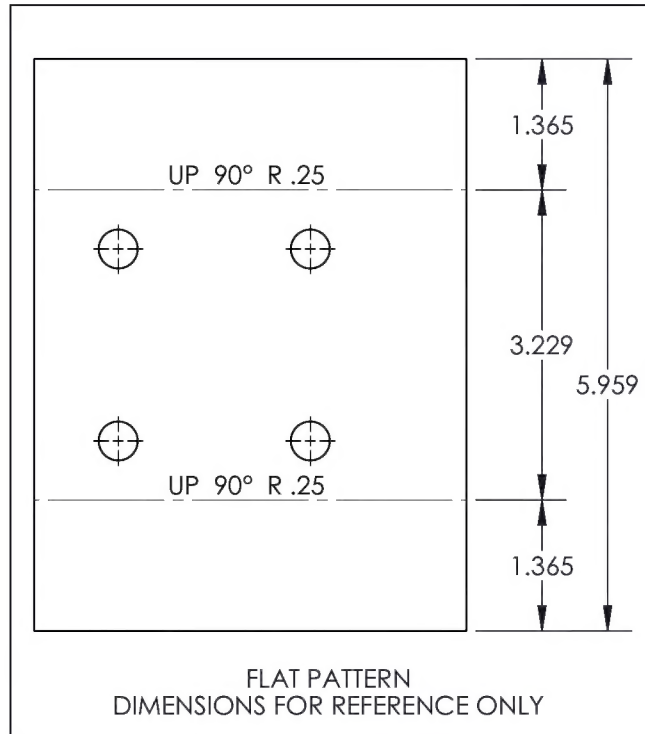
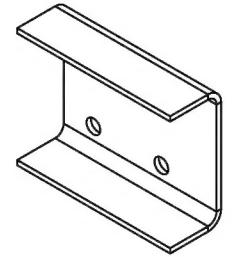
(-9)

PIVOT TABS

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-9	REV 14
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -14 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 5/22/2001
	SHEET 8 OF 37

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-11 CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 10ga IS .13(10ga).	11/6/2015	DPD	JAG

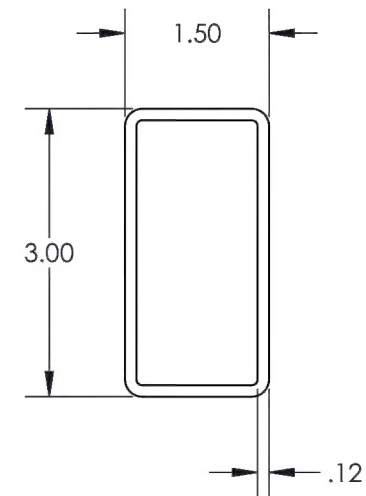
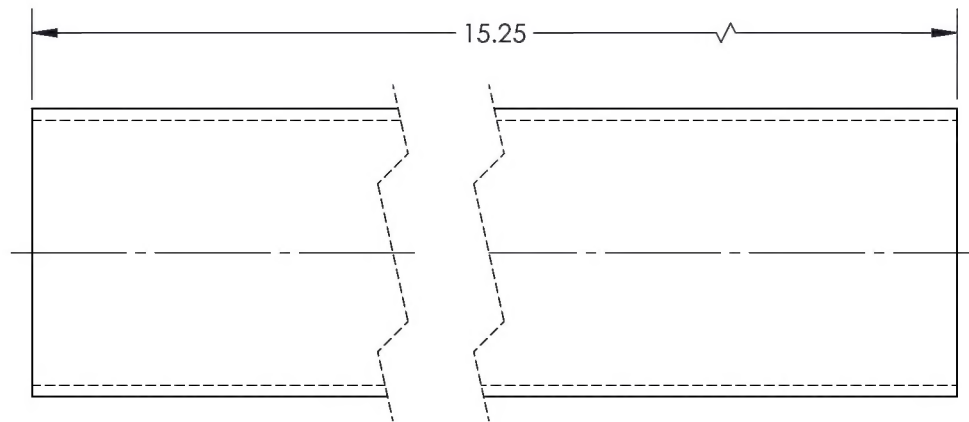
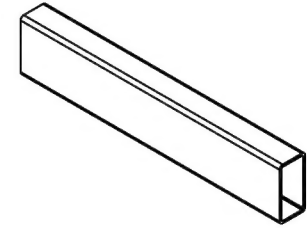


(-11)
CRADLE MOUNT

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-11	REV 14
MAT'L 1018/1020 CR	
HEAT TREAT SEE -14 WELDMENT	
FINISH SEE -14 WELDMENT	
SPEC	
DRAWN BY: COLE	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR: LINDSAY	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: GILBERT	USED ON MODEL SHWEIZER 330
SCALE 1:2	DATE 5/22/2001
SHEET 9 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-13 CH'D DIM WAS (.120) IS .12.	11/6/2015	DPD	JAG



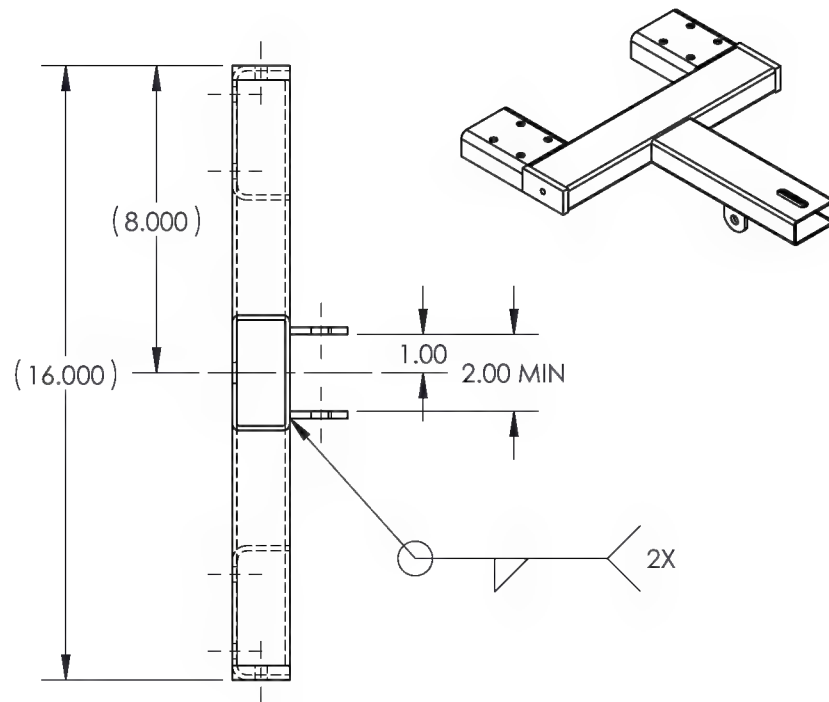
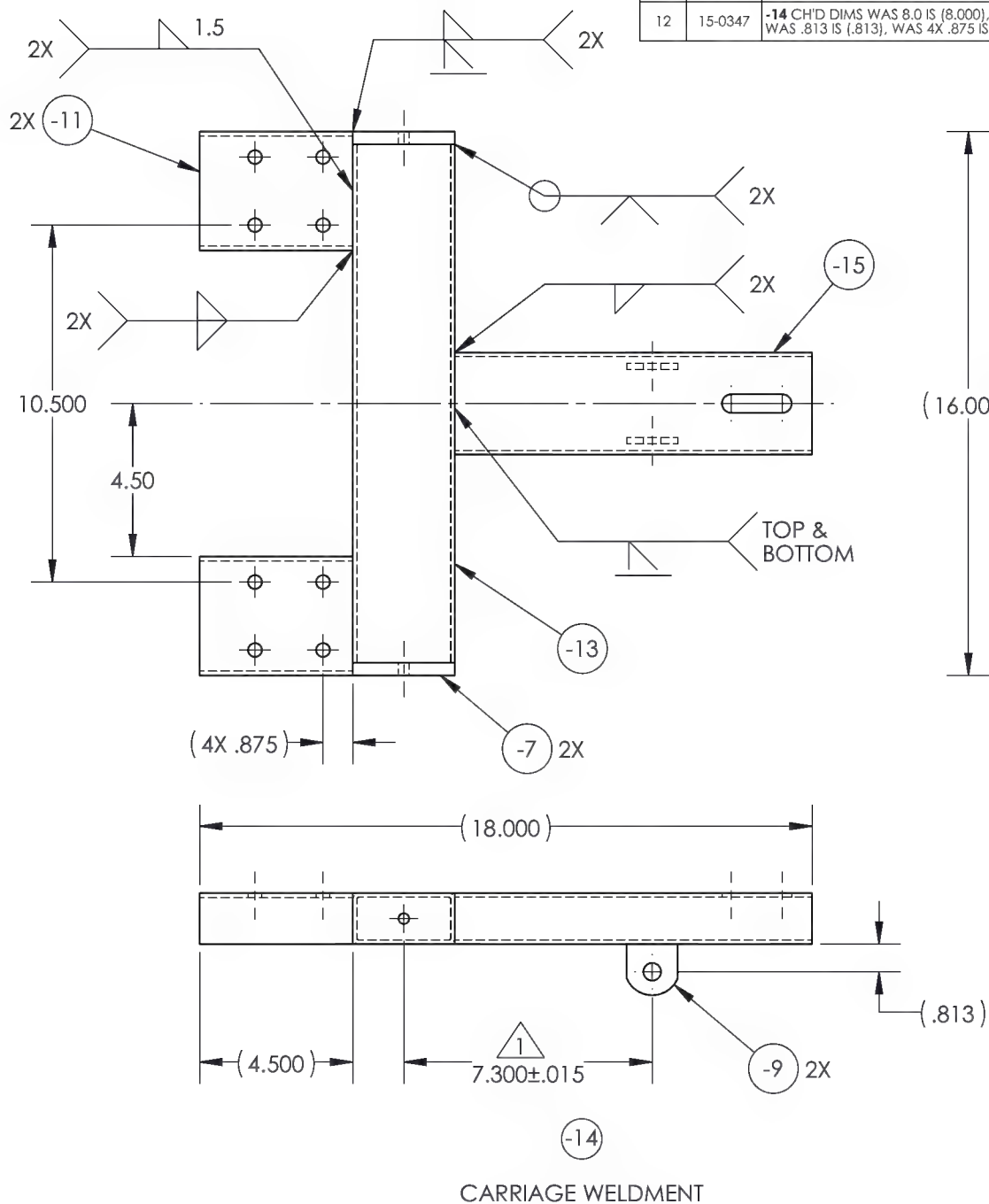
(-13)

CROSS TUBE

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-13	REV 14
MAT'L STEEL TUBE HEAT TREAT FINISH SEE -14 WELDMENT SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL SHWEIZER 330	
SCALE 1:2	DATE 5/22/2001
SHEET 10 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
9		ADDED -14 MISSING 10.50 DIM BETWEEN HOLES ON -11 MOUNTS & CH'D SOME TOLERANCES PER G.E	12/1/2011	RJC	GE
10		CH'D -14 DIM FROM 7.3 TO 7.3±.015 AND ADDED NOTE PER S.E.	5/7/2012	RJC	SE
12	15-0347	-14 CH'D DIMS WAS 8.0 IS (8.000), WAS 16.0 IS (16.000), WAS 18.0 IS (18.000), WAS 4.500 IS (4.500), WAS .813 IS (.813), WAS 4X .875 IS (4X .875). DELETED DIM 5.1.	11/6/2015	DPD	JAG



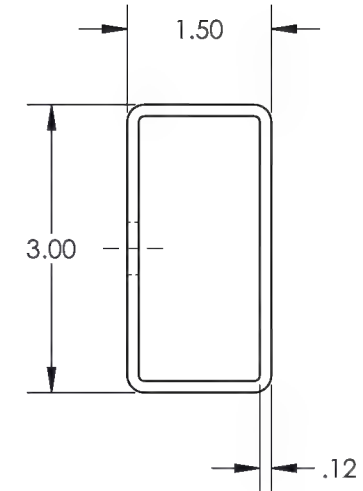
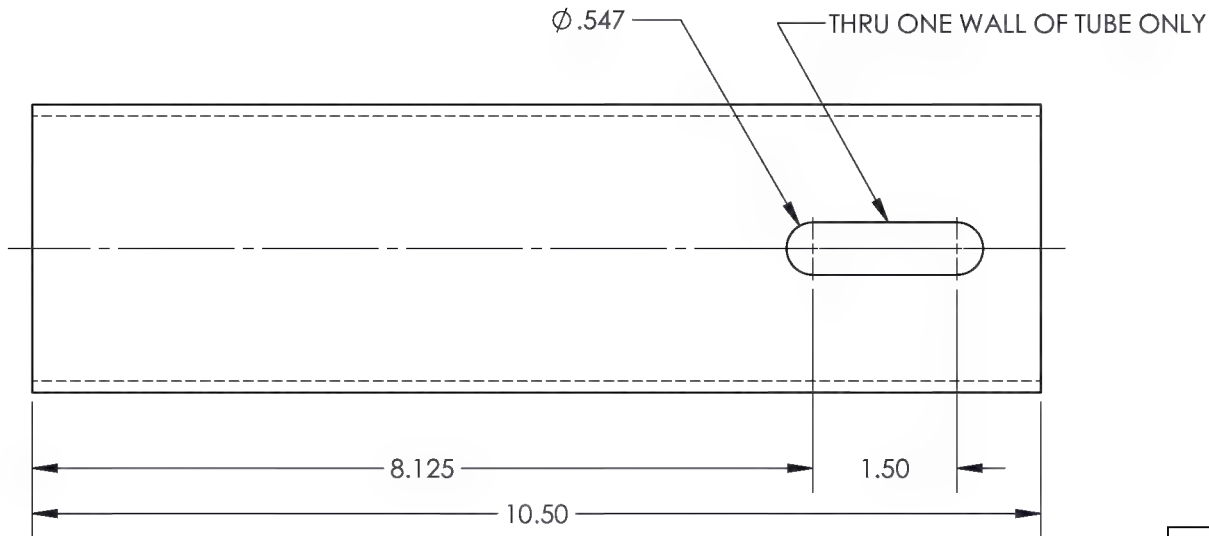
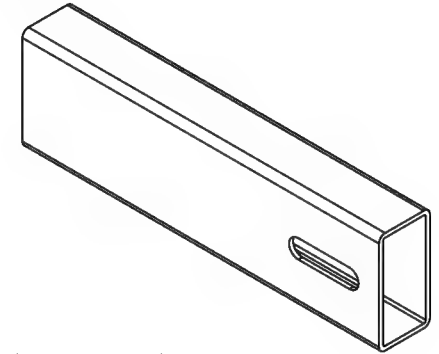
NOTE:

USE RBT18640-101-A AS ALIGNMENT FIXTURE FOR WELDING -9.

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-14	REV 14
MAT'L REAT TREAT FINISH SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL SHWEIZER 330	
SCALE 1:5	DATE 5/22/2001
SHEET 11 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-15 SLOT LENGTHENED TO ALLOW FOR GREATER ADJUSTMENT.	2/22/2002		
12	15-0347	-15 CH'D DIMS WAS Ø.500 IS Ø.547, WAS 8.875 IS 8.125, WAS 2.00 IS 1.50, WAS (.120) IS .12..	11/6/2015	DPD	JAG

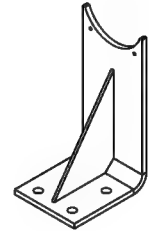
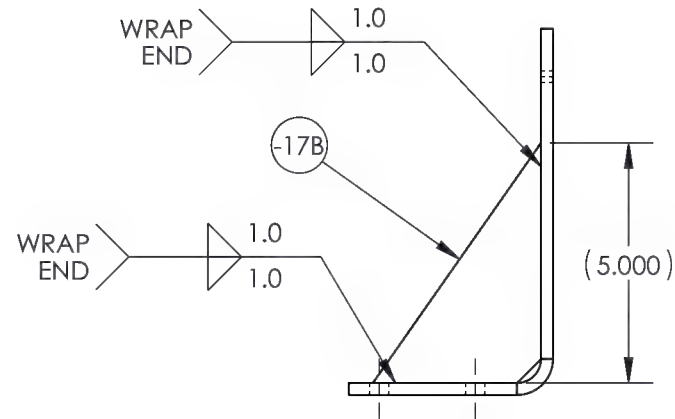
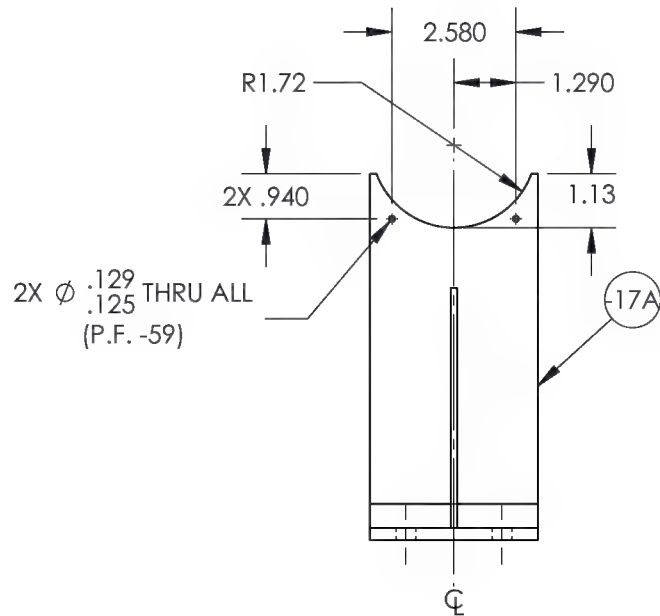


(-15)
TUBE

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-15	REV 14
MAT'L STEEL TUBE HEAT TREAT FINISH SEE -14 WELDMENT SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL SHWEIZER 330	
SCALE 1:2	DATE 5/22/2001
SHEET 12 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-17 ADDED DIM (5.000).	11/6/2015	DPD	JAG
14	17-0043	-17 ADDED DIM'S R1.72, 1.290, 2.580, 1.13, 2X .940, 2X Ø.129/.125 THRU ALL (P.F. -59).	2/13/2017	RJC	JAG

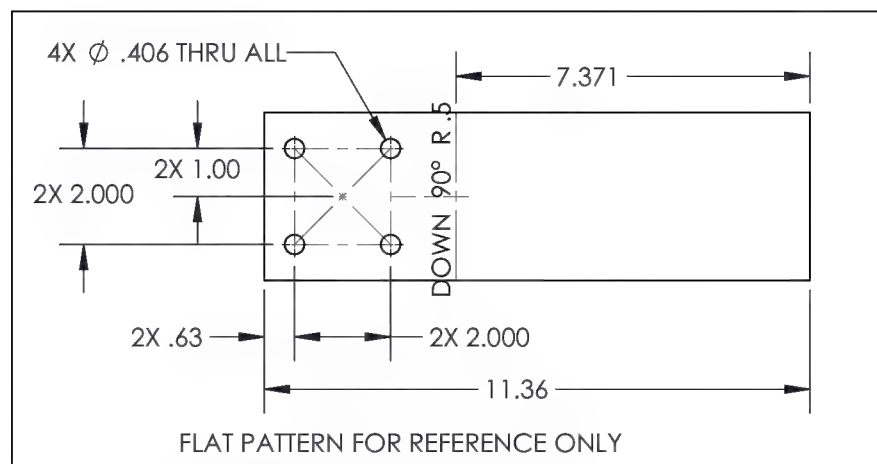
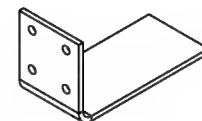
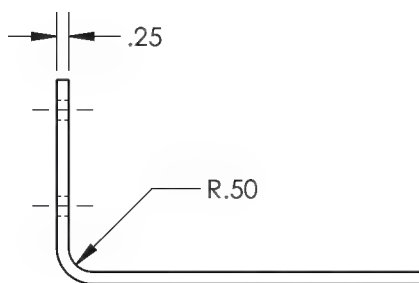
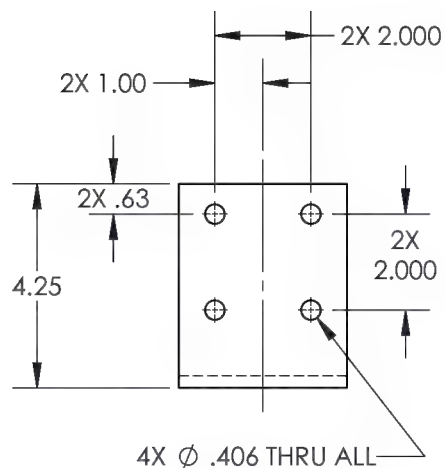
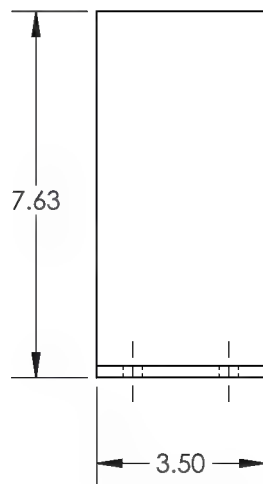


(17)
CRADLE WELDMENT

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-17	REV 14
MAT'L AL 6061-T6	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FINISH POWDER COAT WHITE	.XXX ± .010 FRACTIONS ± 1/8
SPEC ASME Y14.5M-2009	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR: LINDSAY	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: GILBERT	USED ON MODEL SHWEIZER 330
SCALE 1:4	DATE 5/22/2001
SHEET 13 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-17A MOVED Ø.125 HOLES TO -18 ASSY. CH'D DIM WAS 4X Ø.375 IS 4X Ø.406.	11/6/2015	DPD	JAG
13	16-0203	-17A CH'D MATERIAL WAS A709 GRADE 36 IS A36/1018/1020 HR.	11/1/2016	RJC	JAG
14	17-0043	-17A DELETED DIM'S 1.13, 6.50 R1.72, ADDED DIM 7.63.	2/13/2017	RJC	JAG



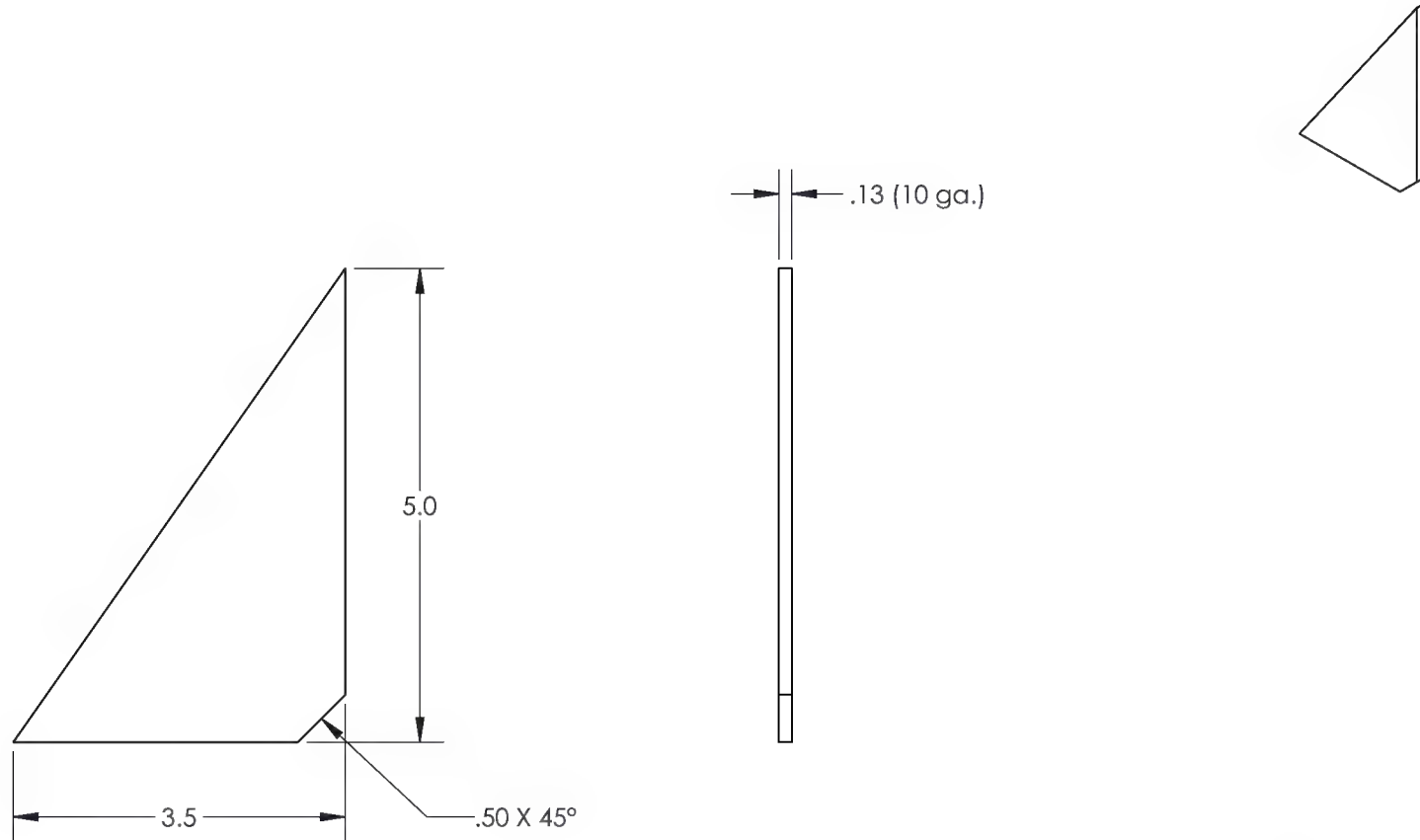
(-17A)

CRADLE ARM

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-17A	REV 14
MAT'L A36/1018/1020 HR HEAT TREAT FINISH SEE -17 WELDMENT SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL SHWEIZER 330	
SCALE 1:4	DATE 5/22/2001
SHEET 14 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-17B CH'D DIM WAS 10ga IS .13(10ga).	11/6/2015	DPD	JAG
13	16-0203	-17B CH'D MATERIAL WAS 1018/1020 CR IS A36/1018/1020 HR.	11/1/2016	RJC	JAG



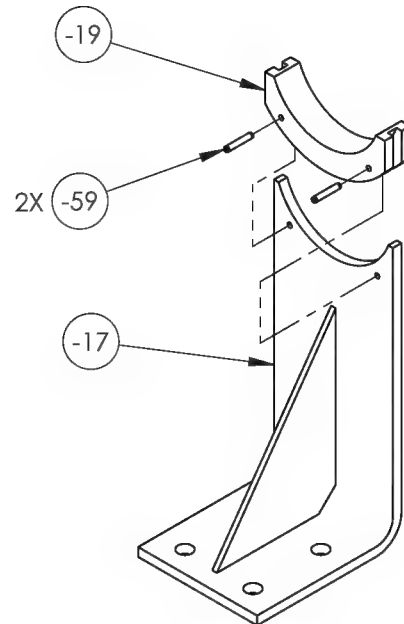
(-17B)

CRADLE ARM GUSSET

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-17B	REV 14
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -17 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:2	DATE 5/22/2001
	SHEET 15 OF 37

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-18 ADDED DIM 2X Ø.125-.129. ADDED TEMPLATE NOTE.	11/6/2015	DPD	JAG
13	16-0203	-18 CORRECTED P/N WAS -17A IS -17.	11/1/2016	RJC	JAG
14	17-0043	-18 DELETED FRONT VIEW WITH 2X Ø.129/.125 THRU ALL Δ . DELETED NOTE Δ .	2/13/2017	RJC	JAG

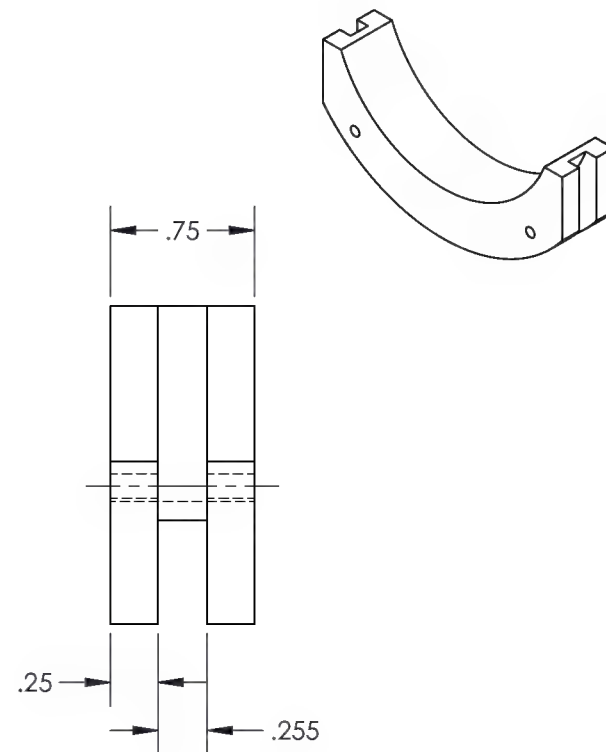



(-18)

CRADLE ARM ASSEMBLY

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-18	REV 14
MAT'L FEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	SHWEIZER 330
SCALE 1:2	DATE 5/22/2001
SHEET 16 OF 37	

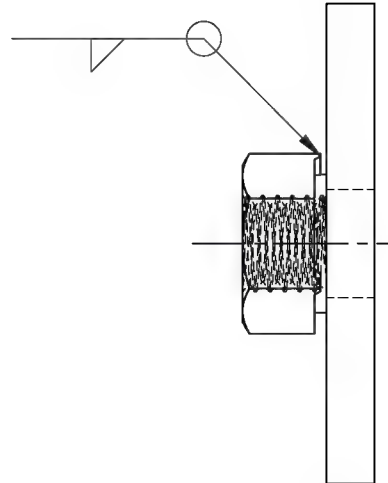
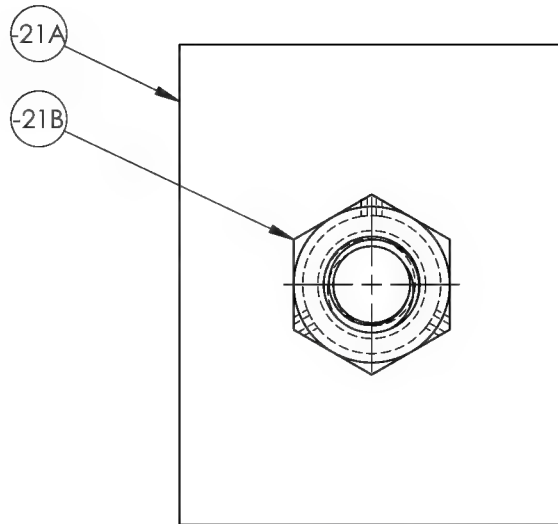
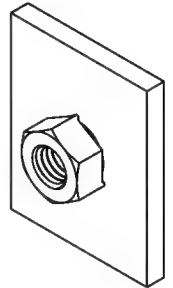
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-19 RADIUS INCREASE TO Ø3.220 FOR BETTER FIT ON ENGINE.	2/22/2002		
8		CH'D -19 DIM .125 TO 1.19.	5/12/2009	WP	
12	15-0347	-19 CH'D DIMS WAS 2X 1.53 IS (2X 1.53), WAS 2X 1.29 IS (1.290), WAS 2X Ø.125 IS 2X Ø.125-129. ADDED DIMS 2X .94, (2X .593), 2.58, .47.	11/6/2015	DPD	JAG
13	16-0203	-19 CH'D MATERIAL WAS BLACK UHMW IS DELRIN/ACETAL.	11/1/2016	RJC	JAG



			
TITLE			
ENGINE LIFT ASSEMBLY			
DWG NO.			REV
269T3301-19			14
MAT'L DELRIN/ACETAL		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH		.XXX ± .010 FRACTIONS ± 1/8	
SPEC		.XX ± .03 ANGLES ± 1°	
		.X ± .1 SURFACES = 125/√	
DRAWN BY: COLE		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
CHECKED: DUERFELDT		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
OPPS APPR: ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
QA APPR: LINDSAY		USED ON MODEL	
APPROVED: GILBERT		SHWEIZER 330	
SCALE	1:1	DATE	5/22/2001
		SHEET 17 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-21 ADDED CENTER NOTE.	11/6/2015	DPD	JAG



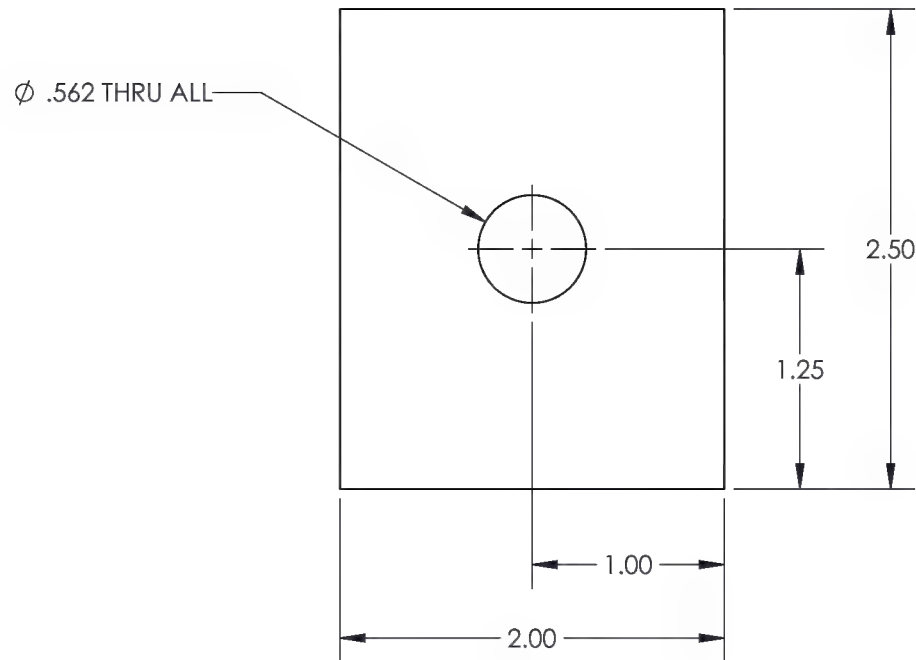
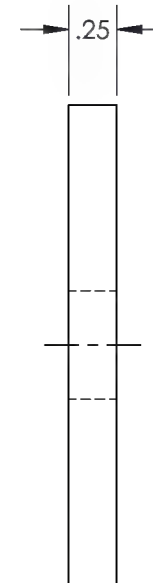
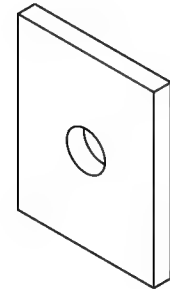
NOTE:
CENTER -21B WELDNUT ON HOLE OF -21A PLATE.

(-21)
NUT PLATE WELDMENT

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-21	REV 14
MAT'L REPT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	SHWEIZER 330
SCALE 1:1	DATE 5/22/2001
SHEET 18 OF 37	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



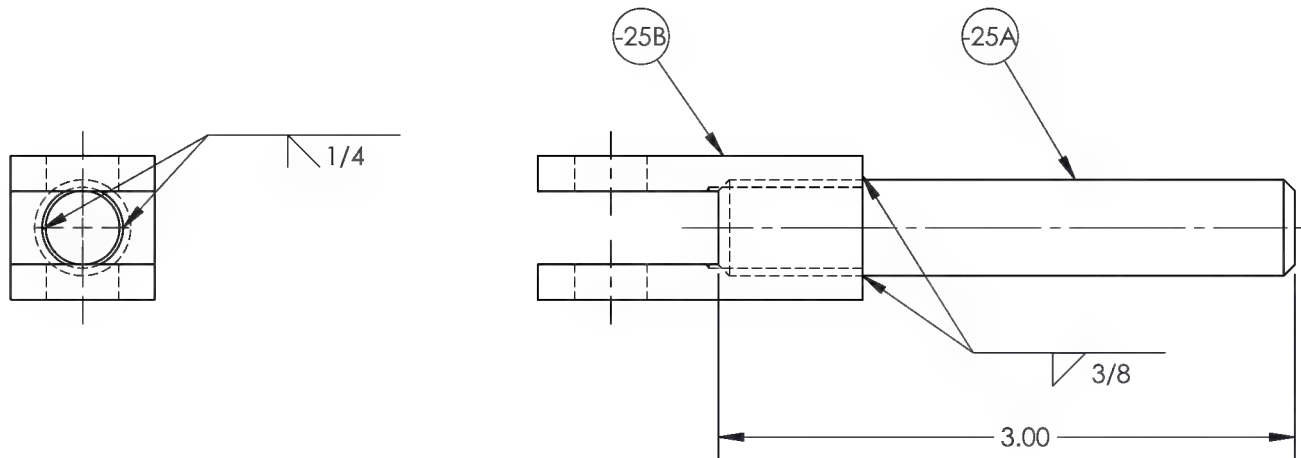
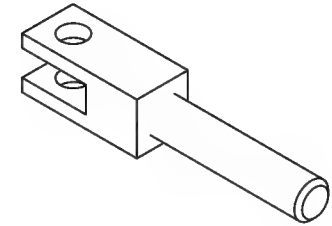
(-21A)

PLATE

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-21A	REV 14
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -21 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:1	DATE 5/22/2001
	USED ON MODEL
	SHWEIZER 330
	SHEET 19 OF 37

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL



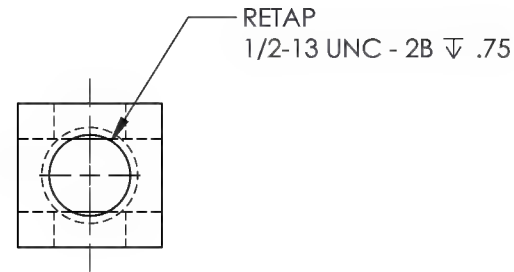
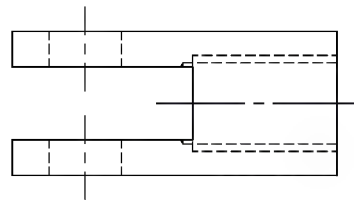
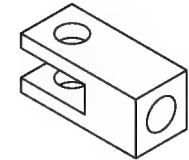
(-25)

STUD WELDMENT

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-25	REV 14
MAT'L HEAT TREAT FINISH BLACK ZINC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°
SPEC ASTM B633 TYPE II SC 2	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: COLE	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	SHWEIZER 330
APPROVED: GILBERT	
SCALE 1:1	DATE 5/22/2001
SHEET 20 OF 37	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



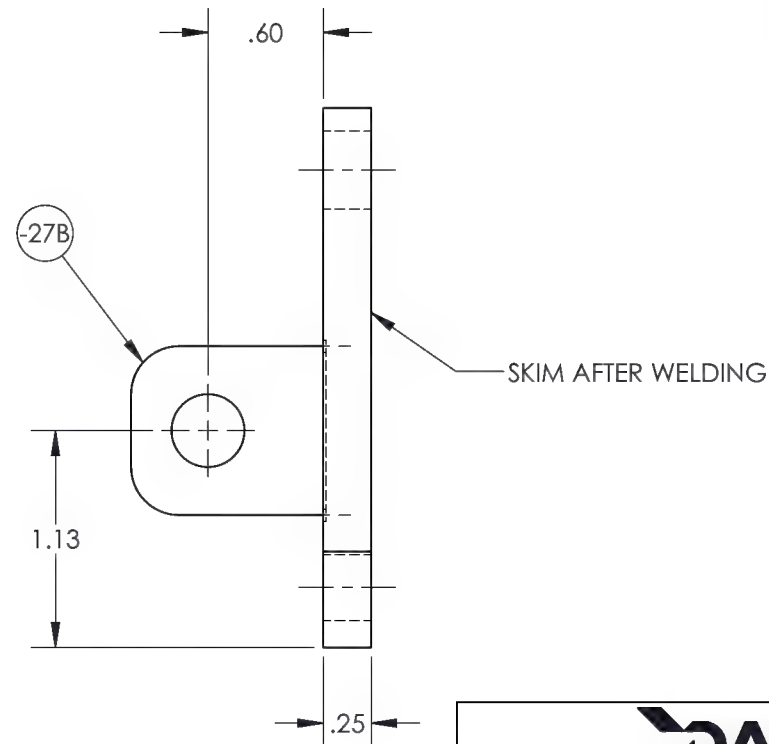
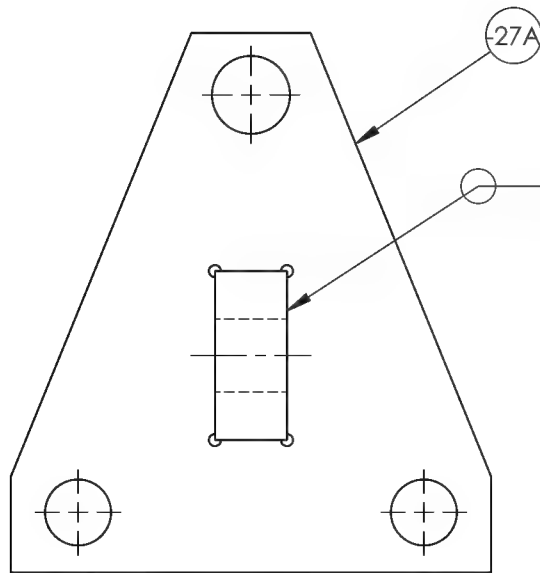
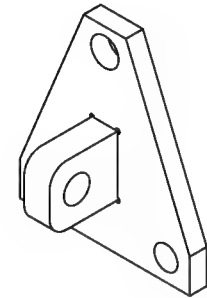
(-25B)

TAPPED CLEVIS YOKE

TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-25B	REV 14
MAT'L STEEL HEAT TREAT FINISH SEE -25 WELDMENT SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX \pm .010 FRACTIONS \pm 1/8 .XX \pm .03 ANGLES \pm 1° .X \pm .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: COLE	USED ON MODEL
CHECKED: DUERFELDT	SHWEIZER 330
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:1	DATE 5/22/2001
SHEET 21 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-27 CH'D DIM WAS .250 IS .25.	11/6/2015	DPD	JAG



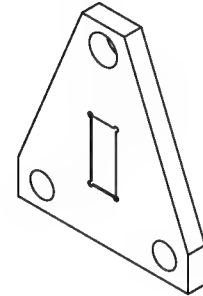
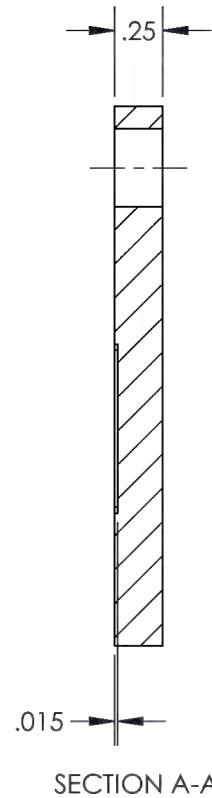
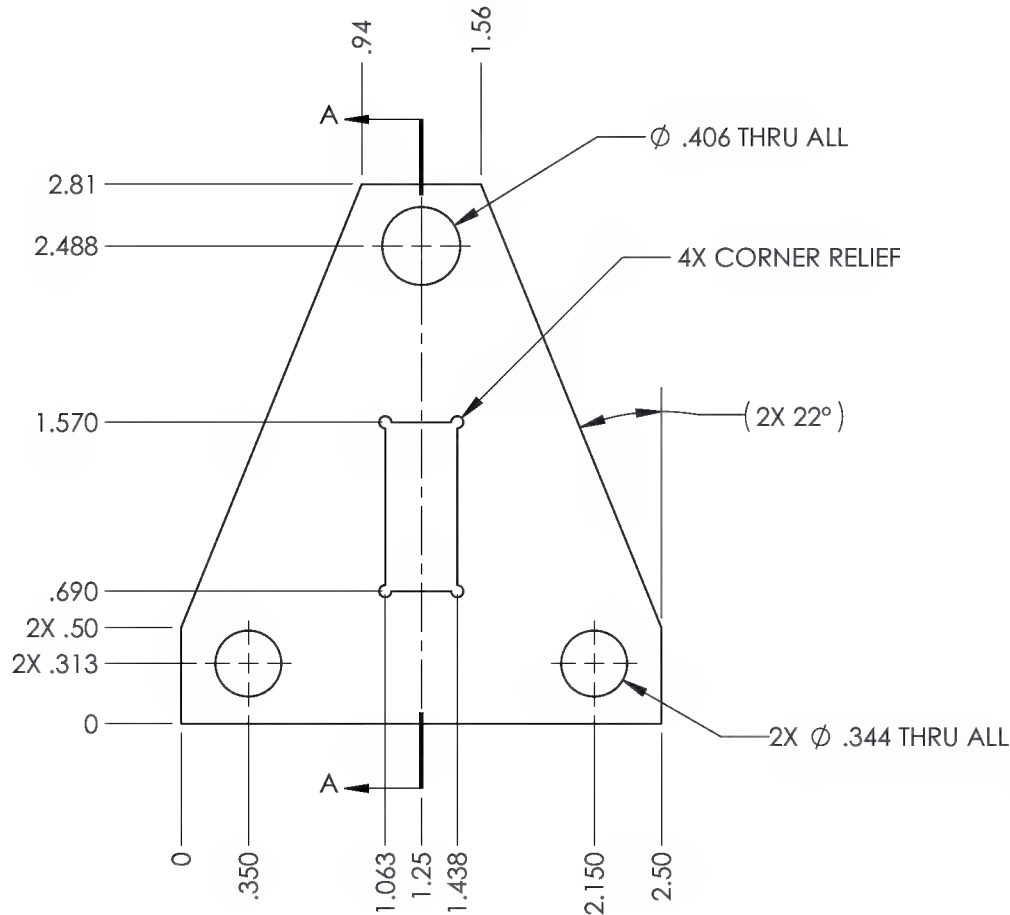
(27)

FRONT ENGINE MOUNT WELDMENT

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-27	REV 14
MAT'L REAT	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TREAT FINISH BLACK ZINC	.XXX ± .010 FRACTIONS ± 1/8
SPEC ASTM B633 TYPE II SC 2	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125° ✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR: LINDSAY	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: GILBERT	USED ON MODEL SHWEIZER 330
SCALE 1:1	DATE 5/22/2001
SHEET 22 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11		-27A ADDED NESTING POCKET TO PART.	3/29/2013	BIM	GE
12	15-0347	-27A DELETED DIMS 4X .063, 1.130. CH'D DIM WAS 22° IS (22°). ADDED 4X CORNER RELIEF NOTE.	11/6/2015	DPD	JAG

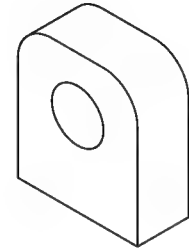
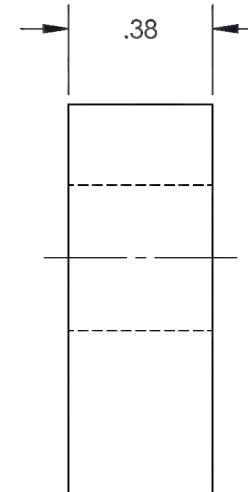
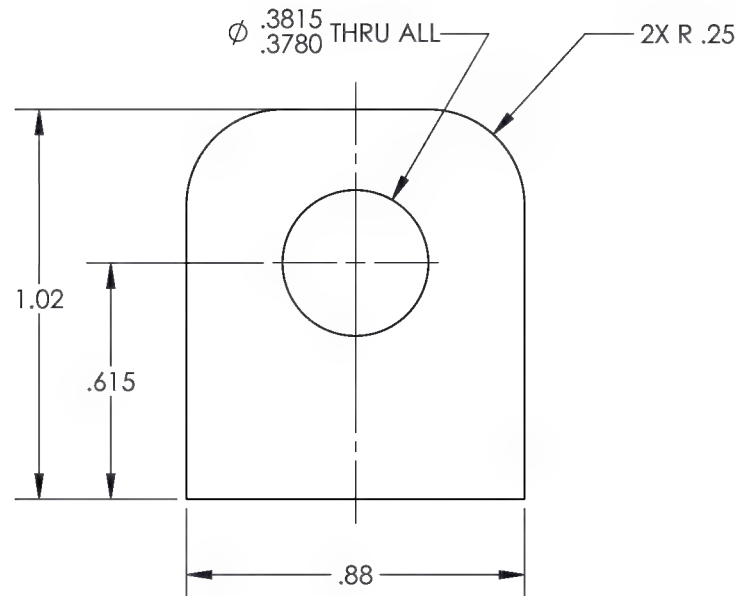


-27A
 MOUNT PLATE

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-27A	REV 14
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH SEE -27 WELDMENT	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	SHWEIZER 330
SCALE 1:1	DATE 5/22/2001
SHEET 23 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4		CHANGED -27B TAB TO MATE WITH OFF THE SHELF CLEVIS.	6/3/2002		
11		-27B CH'D DIM WAS 1.00 IS 1.015 PER G.E.	3/29/2013	BIM	GE
12	15-0347	-27B CH'D DIMS WAS Ø.377 IS Ø.3780-.3815, WAS .60 IS .615, WAS 1.015 IS 1.02.	11/11/2015	DPD	JAG



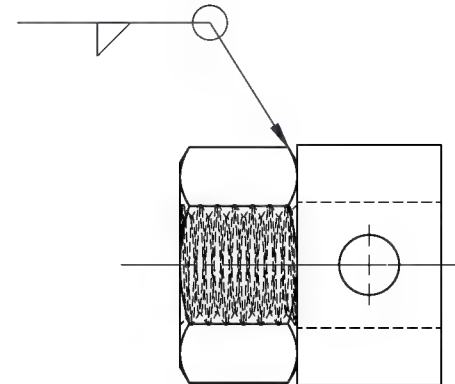
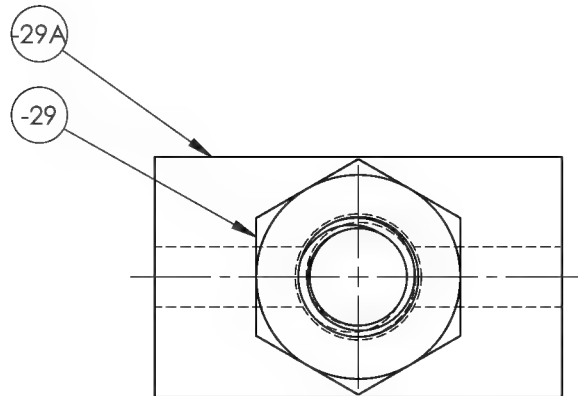
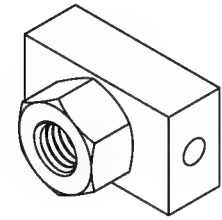
(-27B)

TAB

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-27B	REV 14
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -27 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED:	.015 x 45° OR .015R
OPPS APPR:	2. DIMENSIONAL LIMITS APPLY
QA APPR:	AFTER PLATING
APPROVED: Not Approved For Mfg	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 2:1	USED ON MODEL
DATE 5/22/2001	SHWEIZER 330
SHEET 24 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-28 ADDED CENTER NOTE.	11/6/2015	DPD	JAG



NOTE:
CENTER -29 ACME NUT ON HOLE OF -29A REAR PIVOT BLOCK.



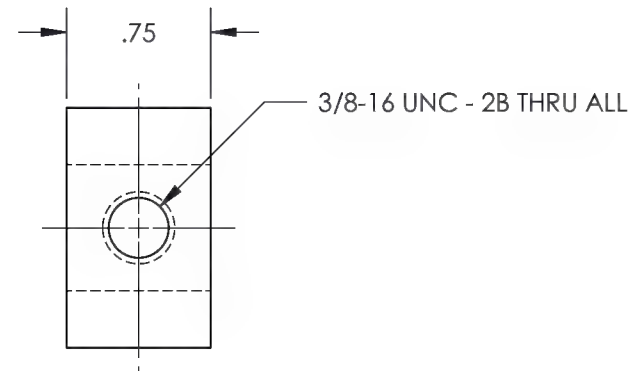
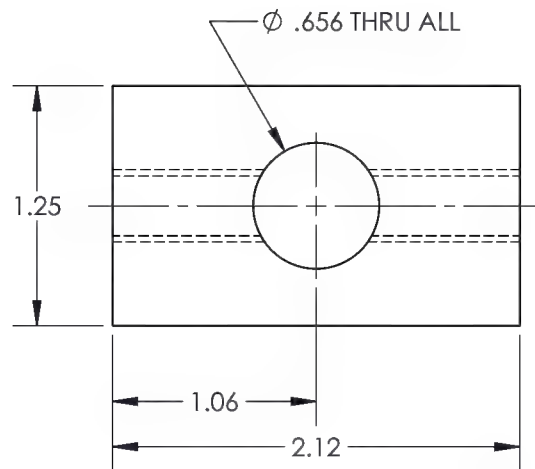
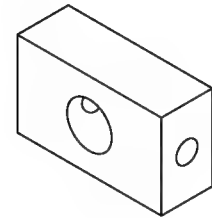
TITLE		ENGINE LIFT ASSEMBLY	
DWG NO.		269T3301-28	REV 14
MAT'L		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH		.XXX ± .010 FRACTIONS ± 1/8	
BLACK ZINC		.XX ± .03 ANGLES ± 1°	
SPEC		.X ± .1 SURFACES = 125°	
ASTM B633 TYPE II SC 2		1. BREAK ALL SHARP EDGES	
DRAWN BY:		.015 x 45° OR .015R	
COLE		2. DIMENSIONAL LIMITS APPLY	
CHECKED:		AFTER PLATING	
DUERFELDT		3. INTERPRET DIM AND TOL PER	
OPPS APPR:		ASME Y14.5M-2009	
ANDERSON		USED ON MODEL	
QA APPR:		SHWEIZER 330	
LINDSAY		DATE	
APPROVED:		5/22/2001	
GILBERT		SHEET 25 OF 37	
SCALE		1:1	

-28

REAR PIVOT BLOCK WELDMENT

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED

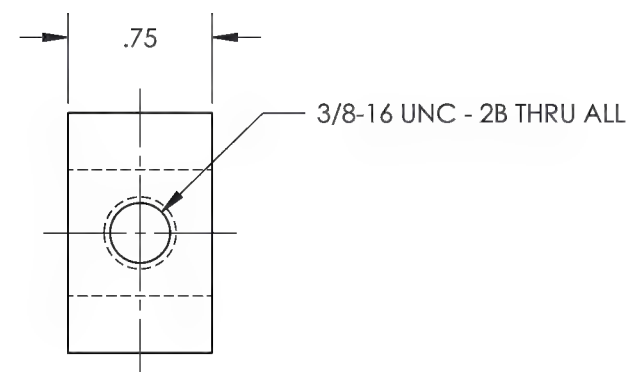
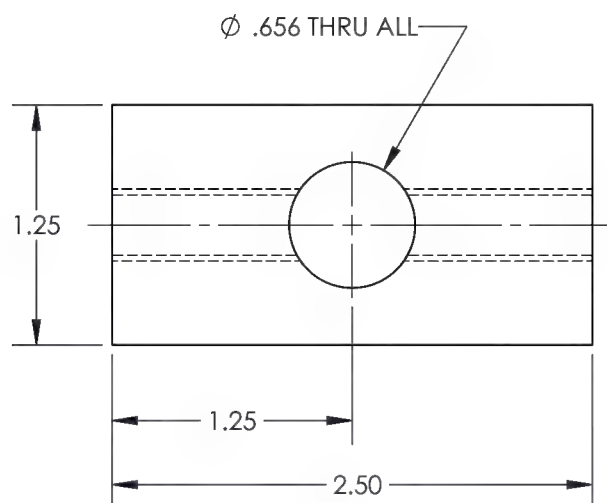
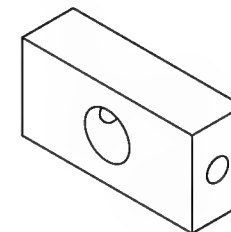


(-29A)

REAR PIVOT BLOCK


DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-29A	REV 14
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -28 WELDMENT	.XXX \pm .010 FRACTIONS \pm 1/8
SPEC	.XX \pm .03 ANGLES \pm 1°
DRAWN BY: COLE	.X \pm .1 SURFACES = 125° ✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 5/22/2001	USED ON MODEL
SHEET 26 OF 37	SHWEIZER 330

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		ADDED C-BORES TO -29 PIVOT BLOCK.	11/21/2006	WP	
12	15-0347	-29B CH'D DIMS WAS 2.75 IS 2.50, WAS 2X 3/8-16 UNC <input type="checkbox"/> Ø.500 <input checked="" type="checkbox"/> .125 IS 3/8-16 UNC-2B.	11/12/2015	DPD	JAG



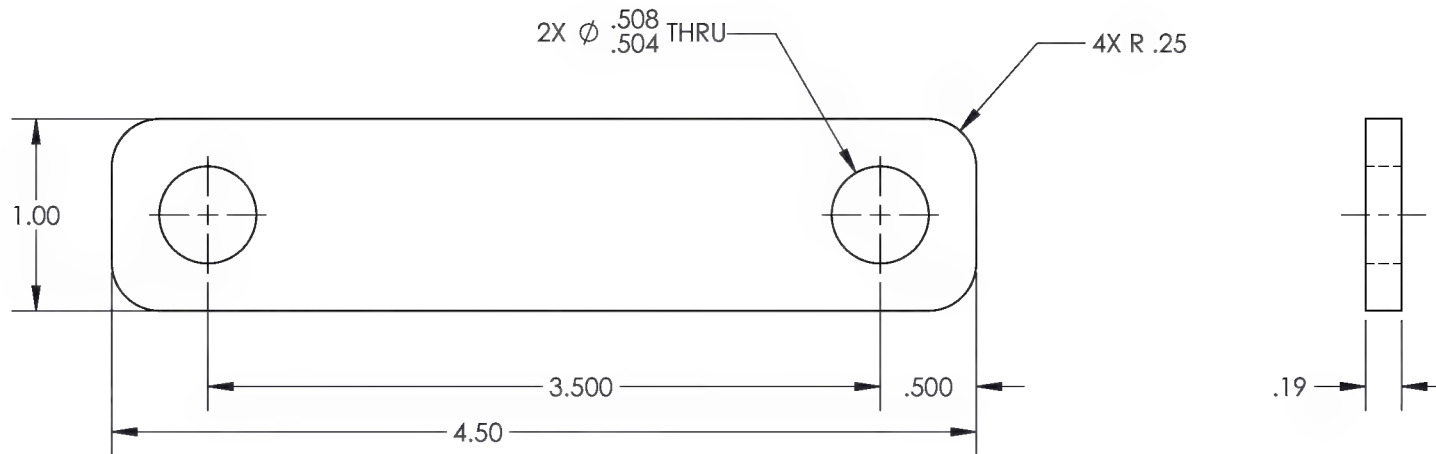
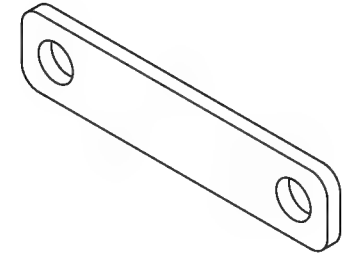
-29B

FRONT PIVOT BLOCK

			
TITLE			
ENGINE LIFT ASSEMBLY			
DWG NO.			REV
269T3301-29B			14
MAT'L A36/1018/1020 HR		UNLESS OTHERWISE SPECIFIED	
HEAT TREAT		DIMENSIONS ARE IN INCHES	
FINISH BLACK ZINC		.XX ± .010 FRACTIONS ± 1/8	
SPEC ASTM B633 TYPE II SC 2		.XX ± .03 ANGLES ±1°	
		.X ± .1 SURFACES = 125/√	
DRAWN BY: COLE		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
CHECKED: DUERFELDT		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
OPPS APPR: ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
QA APPR: LINDSAY		USED ON MODEL	
APPROVED: GILBERT		SHWEIZER 330	
SCALE	1:1	DATE	5/22/2001
		SHEET 27 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-31 CH'D DIMS WAS Ø.500 IS 2X Ø.504-.508, WAS R.25 IS 4X R.25, WAS .188 IS .19.	11/11/2015	DPD	JAG



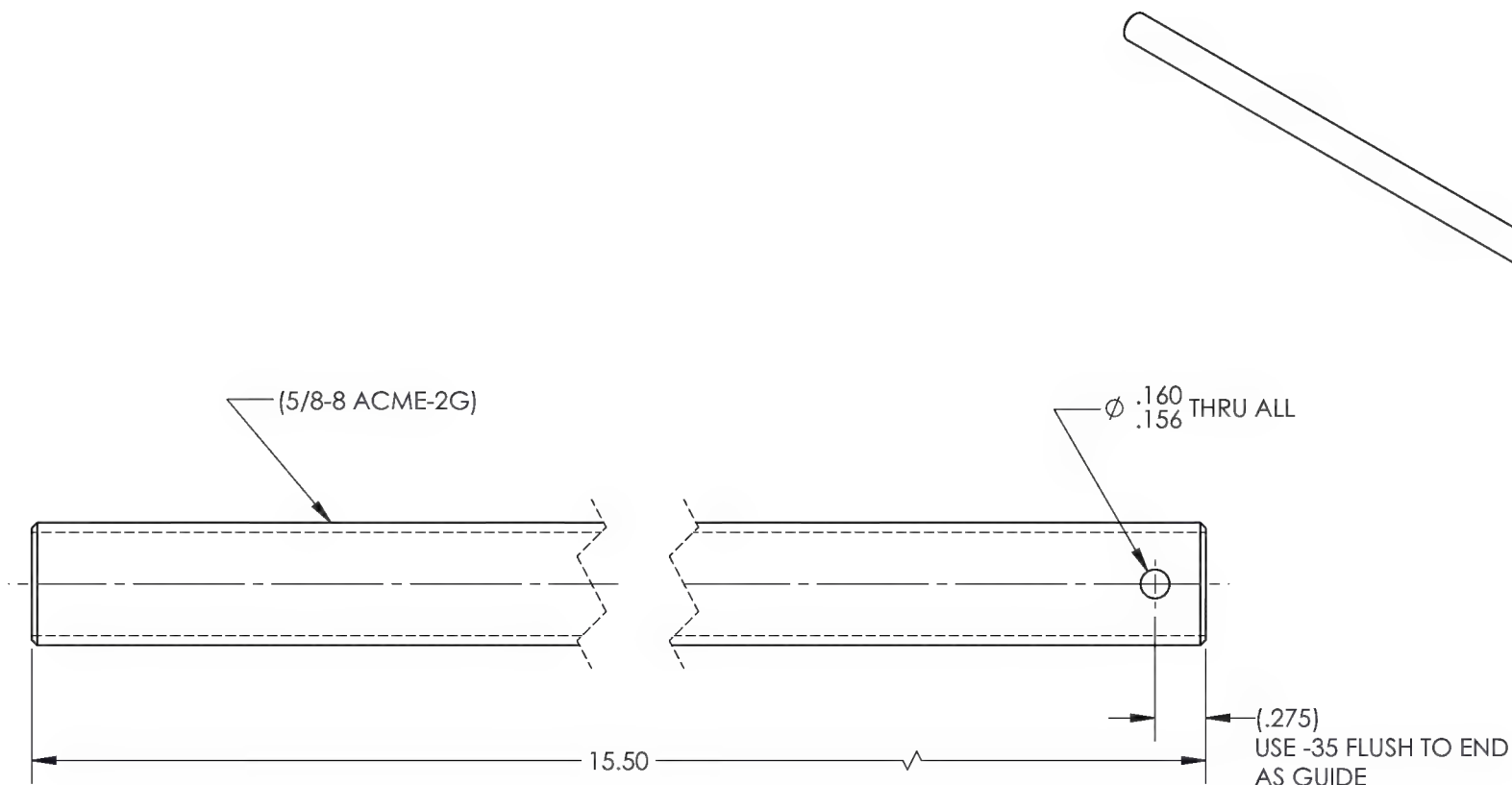
(-31)

LINK

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-31	REV 14
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH BLACK ZINC	.XXX ± .010 FRACTIONS ± 1/8
SPEC ASTM B633 TYPE II SC 2	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125°
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 5/22/2001	USED ON MODEL
SHEET 28 OF 37	SHWEIZER 330

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-33 CH'D DIM WAS Ø.156 IS Ø.156-.160. ADDED DIM (5/8-8 ACME-2G).	11/11/2015	DPD	JAG



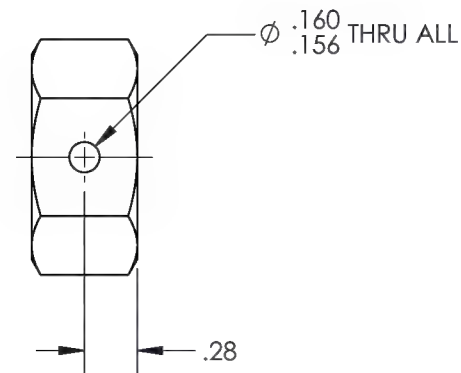
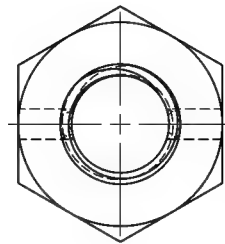
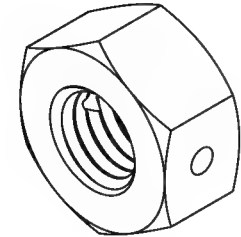
(-33)

ACME THREADED ROD ROD

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-33	REV 14
MAT'L S.S.	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH BLACK ZINC	.XXX ± .010 FRACTIONS ± 1/8
SPEC ASTM B633 TYPE II SC 2	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125°
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 5/22/2001	USED ON MODEL
SHEET 29 OF 37	SCHWEIZER

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-35 DELETED FINISH. CH'D DIMS WAS Ø.156 IS Ø.156-.160, WAS (.275) IS .28.	11/11/2015	DPD	JAG



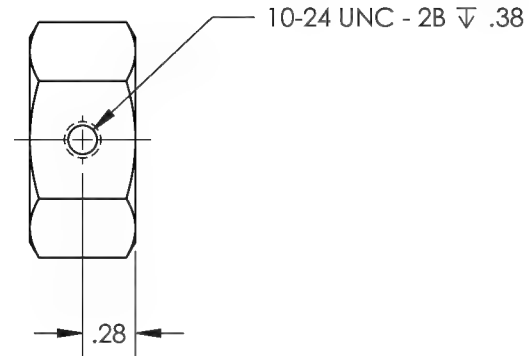
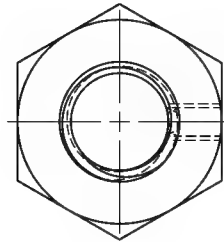
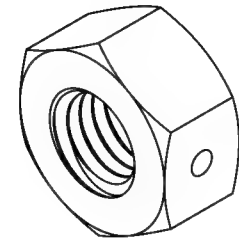
(-35)

ACME NUT DRILLED FOR ROLL PIN

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-35	REV 14
MAT'L S.S.	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	DATE 5/22/2001
	SHEET 30 OF 37

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-36 DELETED FINISH. CH'D DIMS WAS (.275) IS .28, WAS 10-24 UNC ONE SIDE IS 10-24 UNC-2B ∇ .38.	11/11/2015	DPD	JAG



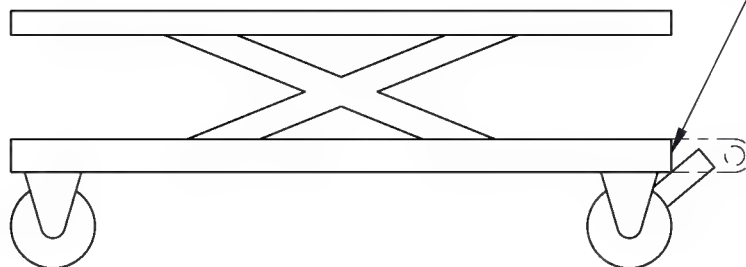
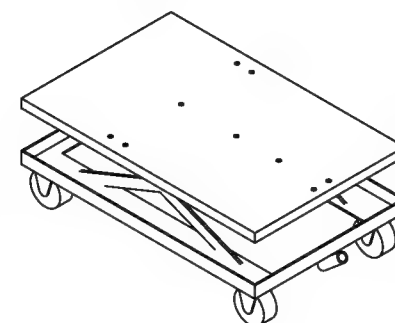
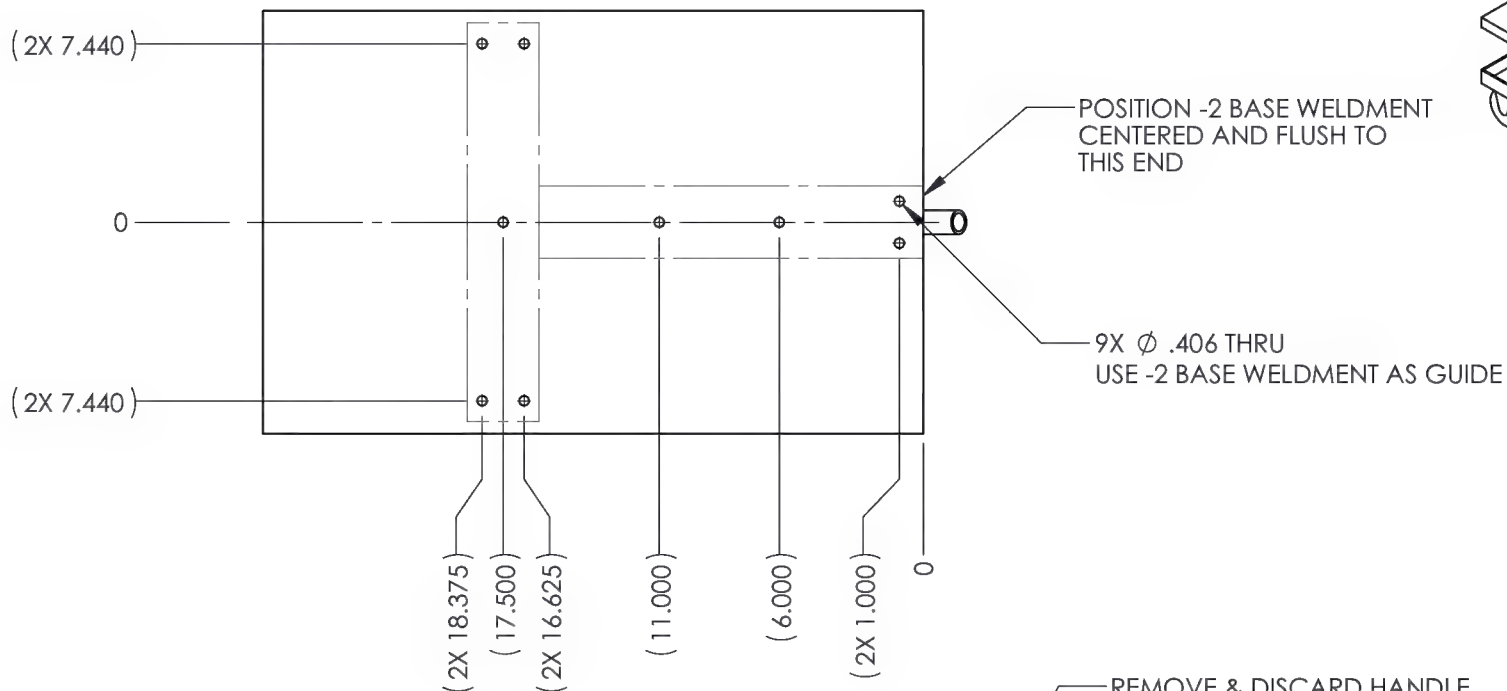
(-36)

ACME NUT DRILLED FOR SET SCREW

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-36	REV 14
MAT'L S.S.	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH	.XXX \pm .010 FRACTIONS \pm 1/8
SPEC	.XX \pm .03 ANGLES \pm 1°
	.X \pm .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	SCHWEIZER 330
SCALE 1:1	DATE 5/22/2001
	SHEET 31 OF 37

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	-51 ADDED DIMS (2X 7.440), (2X 7.440), (2X 18.375), (17.500), (2X 16.625), (11.000), (6.000), (2X 1.000). ADDED POSITION NOTE.	11/6/2015	DPD	JAG



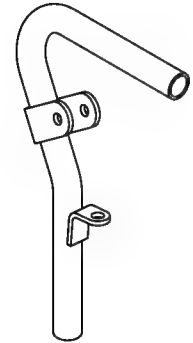
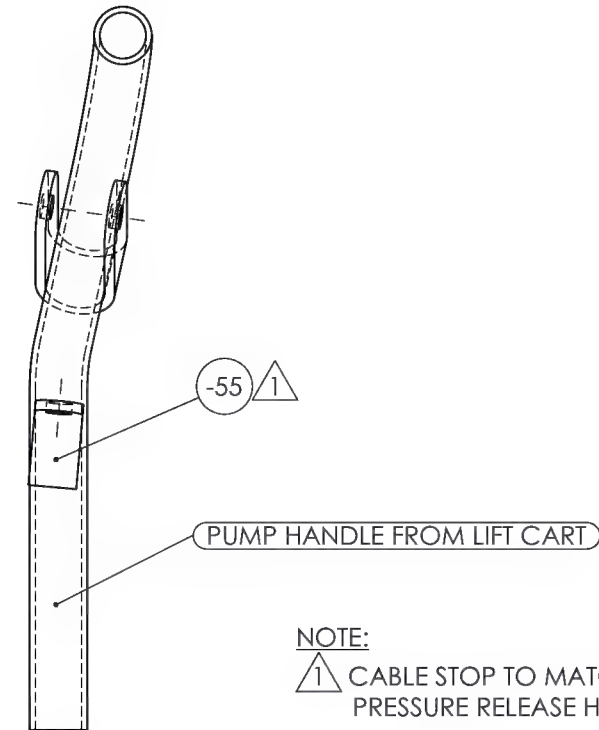
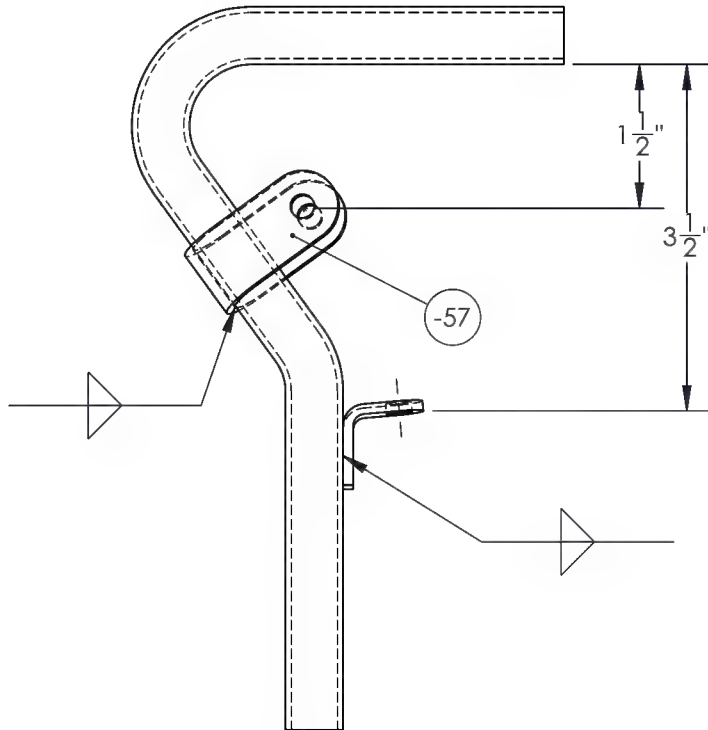
(-51)

HYDRAULIC LIFT CART ASSEMBLY

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-51	REV 14
MAT'L REAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
USED ON MODEL SHWEIZER 330	
SCALE 1:8	DATE 5/22/2001
SHEET 32 OF 37	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
6		ADDED -53 DWG TO FILE FROM HAND PRINT.	11/21/2006	WP



-53

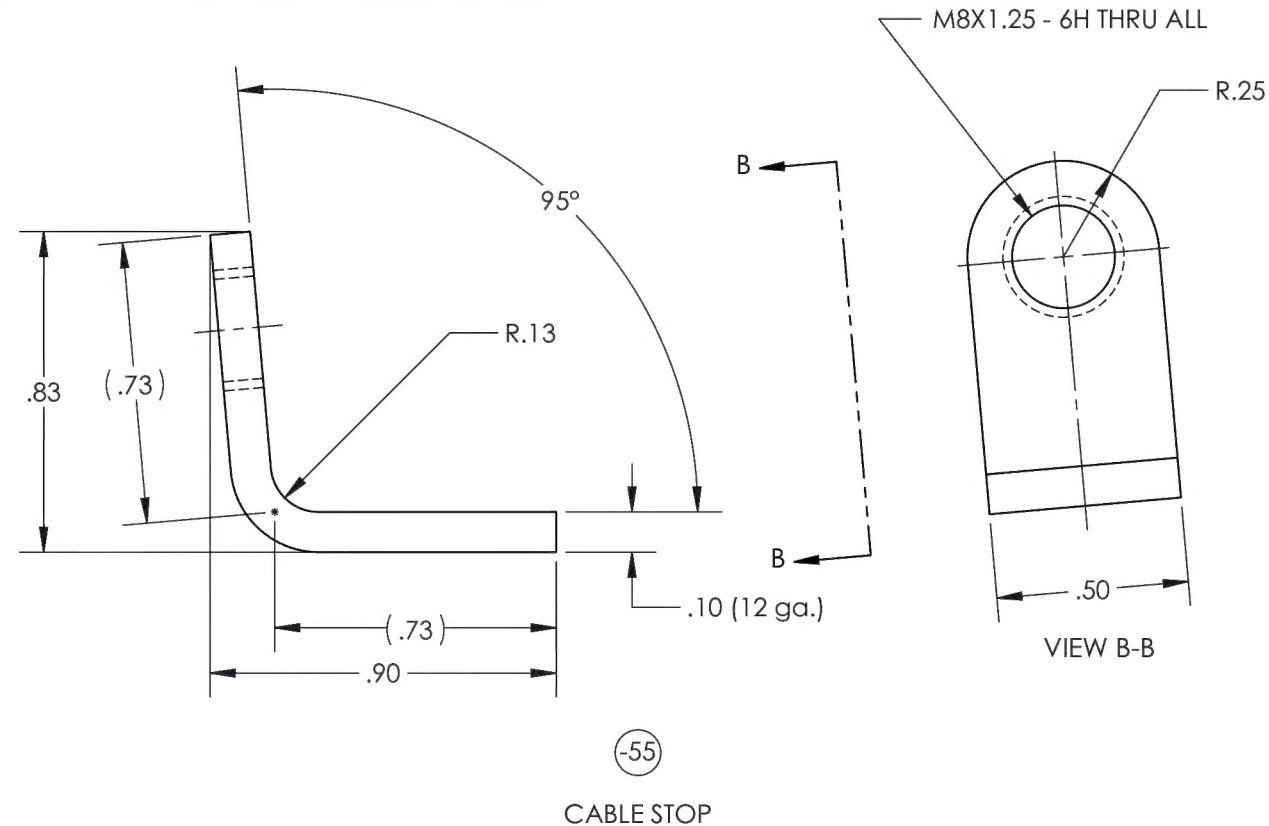
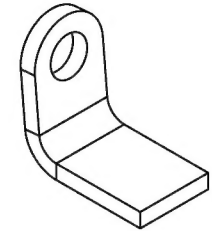
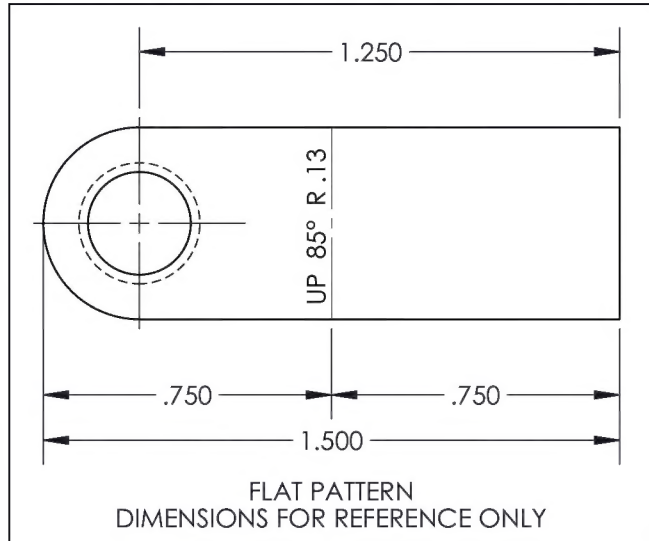
PUMP HANDLE WELDMENT

NOTE:
1 CABLE STOP TO MATCH CENTER OF PRESSURE RELEASE HANDLE.

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-53	REV 14
MAT'L ASTM B633 TYPE II SC 2	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125
HEAT TREAT BLACK ZINC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
FINISH ASTM B633 TYPE II SC 2	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
DRAWN BY: COLE	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
CHECKED: DUERFELDT	USED ON MODEL
OPPS APPR: ANDERSON	SHWEIZER 330
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:2	DATE 5/22/2001
SHEET 33 OF 37	

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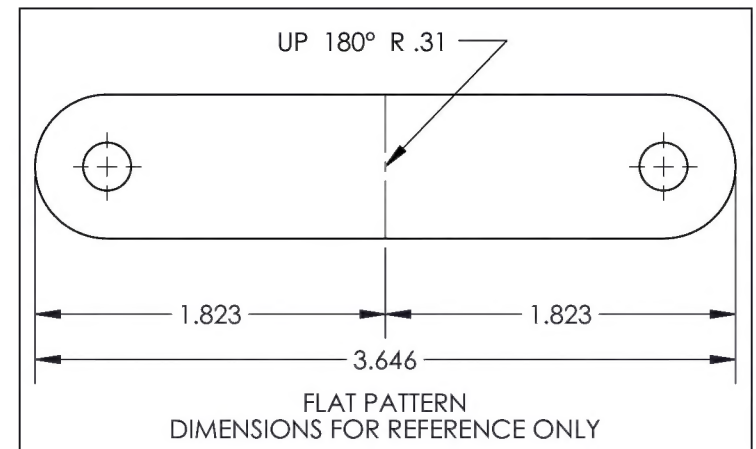
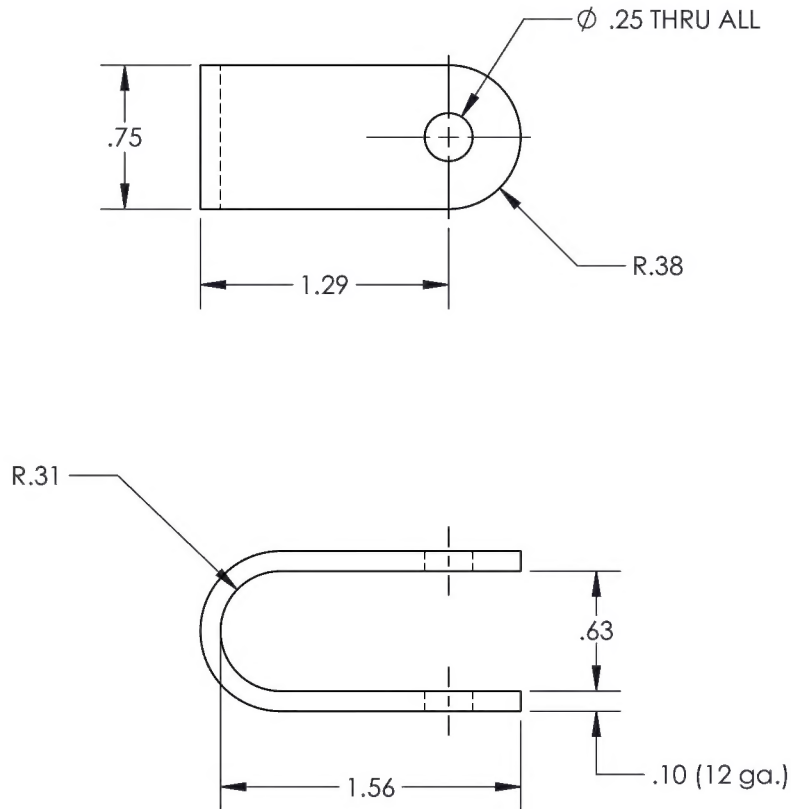
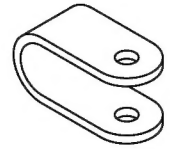
REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
6		ADDED -55 DWG TO FILE FROM HAND PRINTS.	11/21/2006	WP
12	15-0347	-55 ADDED DIMS R.13, .83, .90, (.73), (.73).	11/11/2015	DPD
				JAG



DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-55	REV 14
MAT'L 1018/1020 CR HEAT TREAT FINISH SEE -53 WELDMENT SPEC DRAWN BY: COLE CHECKED: DUERFELDT OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL SHWEIZER 330	
SCALE 2:1	DATE 5/22/2001
SHEET 34 OF 37	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		ADDED -57 DWG TO FILE FROM HAND PRINTS.	11/21/2006	WP	
12	15-0347	-57 DELETED DIMS 1-1/8, 1-1/4. ADDED DIMS 1.56, 1.29. CH'D DIMS WAS R3/8 IS R.38, WAS R5/16 IS R.31.	11/11/2015	DPD	JAG



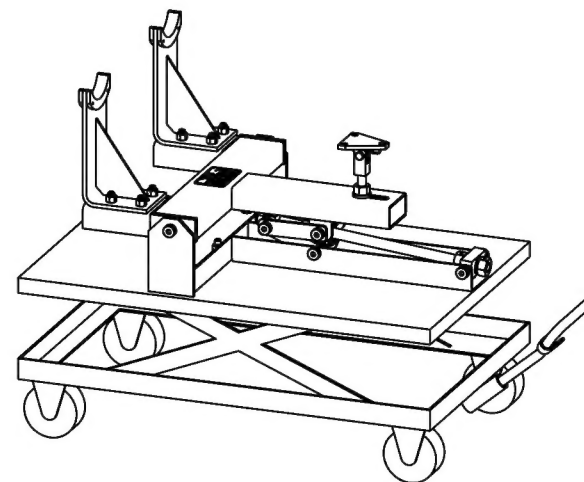
(-57)


RELEASE HANDLE PIVOT

DART AEROSPACE	
TITLE ENGINE LIFT ASSEMBLY	
DWG NO. 269T3301-57	REV 14
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -53 WELDMENT	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
DRAWN BY: COLE	.X ± .1 SURFACES = 125/✓
CHECKED: DUERFELDT	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	DATE 5/22/2001
	SHEET 35 OF 37

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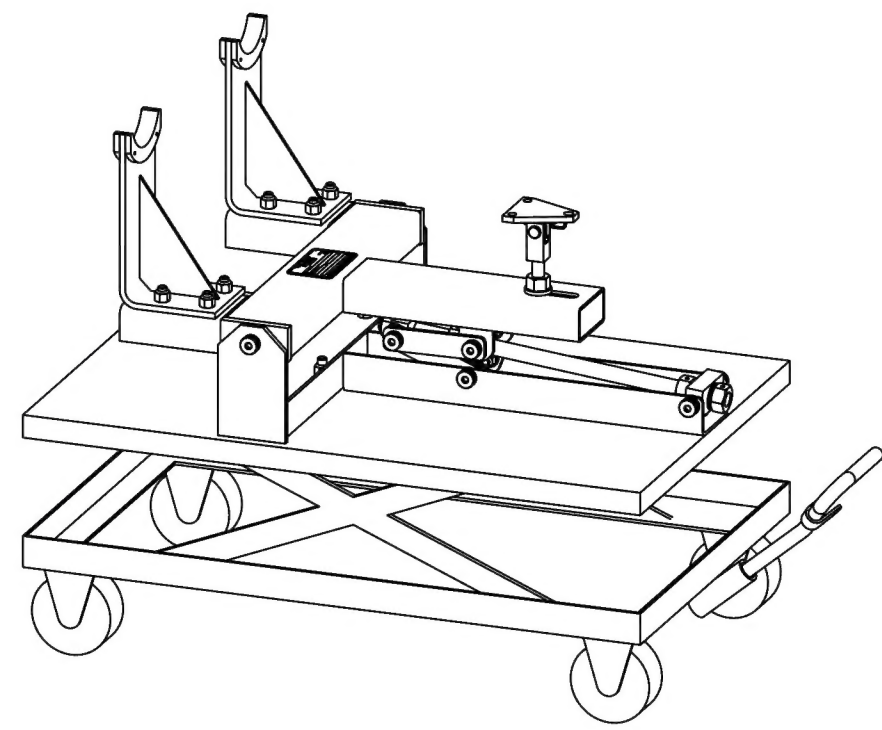
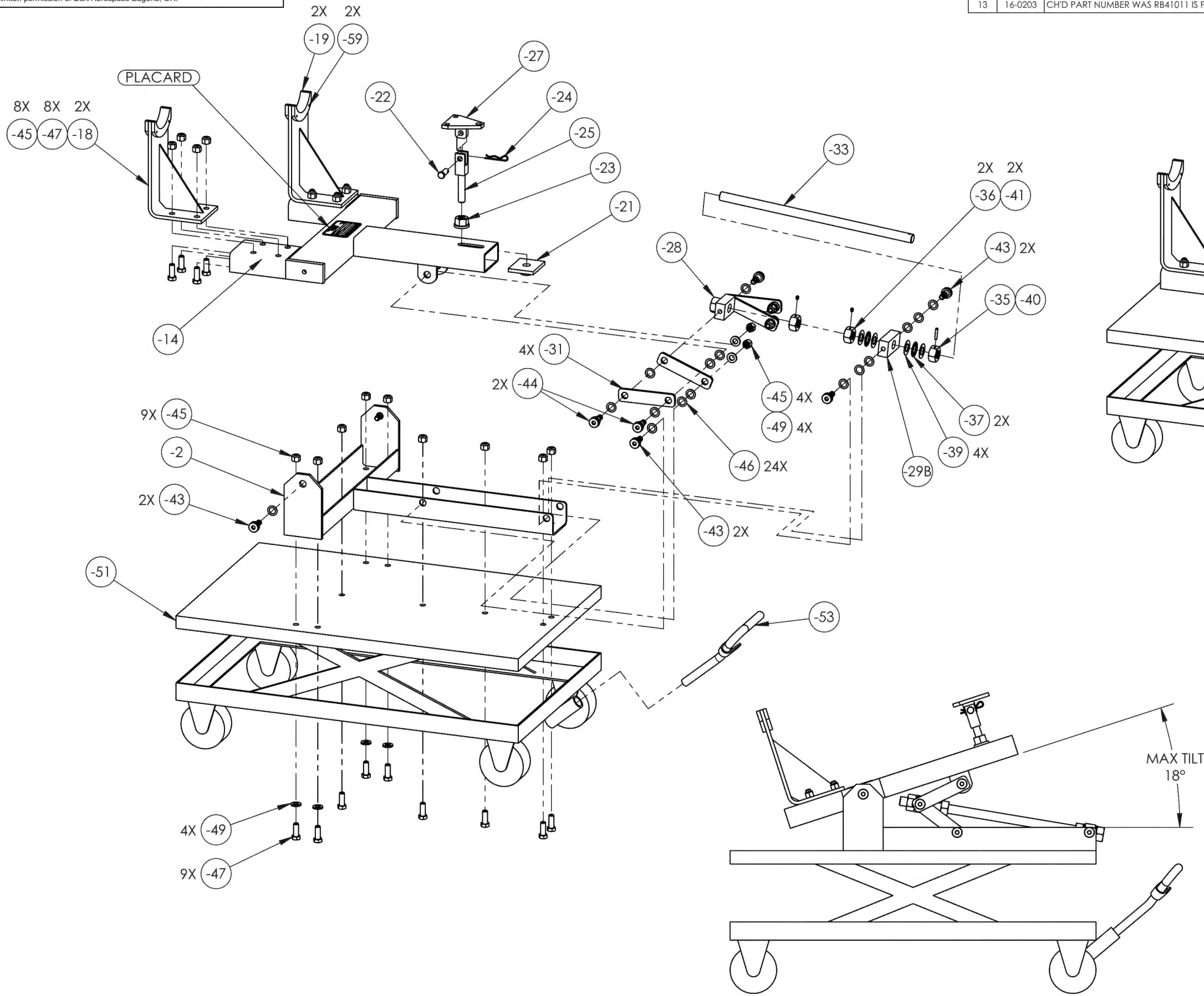
ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	Part #	UNIT QTY	Description	Material
							X	-2	1	BASE WELDMENT	
							X	-14	1	CARRIAGE WELDMENT	
					X			-18	2	CRADLE ARM ASSEMBLY	
				1				-19		CRADLE PAD	DELFIN/ACETAL
			X					-21	1	NUT PLATE WELDMENT	
								-22	1	CLEVIS PIN	S.S.
								-23	1	FLANGE NUT	S.S.
								-24	1	HAIR PIN	S.S.
			X					-25	1	STUD WELDMENT	
		X						-27	1	FRONT ENGINE MOUNT WELDMENT	
X								-28	1	REAR PIVOT BLOCK WELDMENT	
								-29B	1	FRONT PIVOT BLOCK	A36/1018/1020 HR
								-31	4	LINK	A36/1018/1020 HR
								-33	1	ACME THREADED ROD ROD	S.S.
								-35	1	ACME NUT DRILLED FOR ROLL PIN	S.S.
								-36	2	ACME NUT DRILLED FOR SET SCREW	S.S.
								-37	2	THRUST BEARING	STEEL
								-39	4	THRUST BEARING RACE	STEEL
								-40	1	ROLL PIN	S.S.
								-41	2	SOCKET HEAD SET SCREWS	S.S.
								-43	6	SOCKET HEAD SHOULDER BOLTS	S.S.
								-44	4	SOCKET HEAD SHOULDER BOLTS	S.S.
								-45	21	NYLOCK NUTS	S.S.
								-46	24	MACHINE BUSHING WASHERS	S.S.
								-47	17	HEX HEAD CAP SCREWS	S.S.
								-49	8	FLAT WASHERS	S.S.
								-51	1	HYDRAULIC LIFT CART ASSEMBLY	
X								-53	1	PUMP HANDLE WELDMENT	
				2				-59		ROLL PIN	S.S.
								1		PLACARD	ALUMINUM
ASSY -53	ASSY -28	ASSY -27	ASSY -25	ASSY -21	ASSY -18	ASSY -14	ASSY -2				



 190 S. Danebo Ave., Eugene, OR. 97402 1-800-556-4166 e-mail: sales@dartaero.com dartaerospace.com		TITLE	
		ENGINE LIFT ASSEMBLY	
DWG NO.	269T3301	REV	14
SCALE 1:10		DATE 5/22/2001	CUSTOMER 1 OF 2
SHEET		36 OF 37	

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REVISIONS			DATE	INITIAL	APPROVED
REV	ECR	DESCRIPTION			
13	16-0203	CH'D PART NUMBER WAS RB41011 IS PLACARD Δ . ADDED NOTE Δ .	11/2/2016	RJC	JAG



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TITLE ENGINE LIFT ASSEMBLY			
DWG NO. 269T3301	REV 14	CUSTOMER 2 OF 2	
SCALE 1:8	DATE 5/22/2001	SHEET 37	OF 37